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ABSTRACT

These three modular units for preschool children (eight-week unit), grade 2 (nine-week unit), and grade 4 (six-week unit) were developed to facilitate career education by reducing sex-role stereotyping of occupations. (Final progress report of the project is available as CE 024 425.) Within each unit an outline for each week's activities details objectives, materials needed, and procedures. Worksheets designed to be mounted in student notebooks are provided for grades 2 and 4. The unit for preschool children emphasizes the development of curiosity about and interest in an occupation. The unit outline, which is designed for two lessons per week, is as follows: introduction to occupational clusters (week 1): session 1, flannel board and Me Doll activities, and session 2, socio/dramatic play, (weeks 2-7): and review (week 8). Emphasizing interest and ability, not sex or race, as critical factors in career choice, the grade 2 unit contains thirty-six (four per week) group and individual activities in seven occupational clusters: consumer and homemaking, construction, health occupations, public service, transportation, communications and media, and business and office occupations. The grade 4 unit is based on five sessions per week on these topics: Introduction to the Career Cluster Concept, Self and Family Awareness Attitudes, Interdependancy of Occupations, Girls Can! Boys Can! ((Educational Preparation for Employment)), and game review. (Brief sections on module revisions are included.) (YLB)

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TEACHING MODULES FOR EXPANDING OCCUPATIONAL AWARENESS OF PRESCHOOL, SECOND, AND FOURTH GRADE CHILDREN

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TEACHING MODULE FOR EXPANDING

OCCUPATIONAL AWARENESS OF PRESCHOOL CHILDREN

This eight-week modular unit has been designed to expand the occupational awareness of three- and four-year-old preschool children. The emphasis of the module is to develop curiosity about, and interest in, an occupation, regardless of the gender of the child. Through the active manipulation of toys and role-playing experiences, the child will gain understanding of the skills that are required in a career. Ideally each child will identify a career as it relates to his/her interest, not the child's gender.

Two 20-minute sessions per week have been developed for groups of 10 children apiece. As the individual units take shape, the teacher should be aware of the responsiveness demonstrated by the children. The teacher(s) may wish to modify the units somewhat to fit the needs of the children and the size of the class.

Objectives:

1. To introduce the child to the six different occupational clusters.
2. To encourage the child to accept the concept of non-sexist occupations. A person chooses an occupation because the occupation interests him/her, not because of gender.
3. To erode sex role stereotypes associated with occupational preference through the use of toys and games.
4. To encourage curiosity about the child's future occupational goals.

GENERAL INFORMATION

The first week introduces the occupational clusters which will be covered in depth in the second to seventh weeks. The final week reviews the occupation covered.

The second to seventh weeks follow the same format. Session 1 of each unit utilizes the flannel board and the Me Doll basically in the same manner. The flannel board activity and the Me Doll activity are presented in depth immediately below and only referred to in each unit.

Socio/dramatic play is used in Session 2 of each unit to illustrate various concepts of the occupational clusters dealt with that week. General information about the use of socio-dramatic play is presented immediately following the general information on the flannel board and Me Doll. Session 2 of each unit will contain more specific information on the utilization of this technique with each occupational cluster.

A. Session One (the first session of each unit--weeks 2-7)

I. Introduce occupation with the flannel board activity (see following pages).

1. Point out characteristics of the uniforms and equipment used and the jobs people in that occupation perform. Encourage children to discuss their experience with the occupational cluster.
2. Facilitate the awareness of both men and women working in the occupation.
3. Allow children ample time to observe the flannel board figures and ask questions.
4. Emphasize dignity of careers--of choice based on desire, not gender.

II. Me Doll (see following pages)

1. Reinforce awareness of the self's abilities to perform a particular occupation with the use of the Me Doll. The child can identify with occupation by seeing self in mirror face.
2. Encourage all children to respond to who they see and what they can be in the mirror image.
3. Facilitate awareness of type of clothing characteristics of a particular occupation by having children change the clothes in accordance with the individual occupations.

B. Session Two Socio/Dramatic Play (general information for the second session of each unit, weeks 2-7).

I. Suggested unit materials

1. Police Officer--badge, handcuffs, radio, police car
2. Mechanic--garage, tools, cars, other vehicles
3. Doctor-Nurse--hats, gowns, stethoscope, pressure cuff, bandaids, rubber reflex hammer, bandages.
4. Construction worker--blocks, trucks, hard hats
5. Teacher--books, chalk, blackboard
6. Airline personnel--airplanes showing cockpit for pilot and passengers.

II. Role-playing

1. Allow children to develop their own ideas around the preplanned activities. Children with experience with a particular occupation may desire the opportunity to act it out, achieving a better understanding of the occupation.
2. Encourage all children to participate, especially in nontraditional roles
3. Be accepting of a child's resistance to a nontraditional role, but still maintain that the child "try out" the role.

OUTLINE OF FLANNEL BOARD FOR UNITS 1-2, SESSION ONE

I. Introduction

II. Identify all occupations

III. Identify specific occupation

A. Family awareness
B. Equipment used
C. Role of occupation in community
D. Job prestige
E. Who does this job? Men/Women
(C, D, and E can be discussed)

Unit #1, Session #1

Separate occupations and place all figures and equipment upon the flannel board. Draw attention to the flannel board by asking the children to identify the various occupations. As the children label the individuals by their occupations, encourage them to use complete sentences.

Have each child approach the flannel board one at a time and pick out the figures representing the occupation to be discussed that day. As the child picks out the figures, encourage him/her to label them in a complete sentence. "This is the woman or man police officer." The reason for identifying the person as a woman or man is to specify that it is okay for both sexes to do that particular occupation. The teacher should bring this out if the child does not.

Questioning Strategy for Units 2-7, Session One

1. (teacher) What occupation, job, are we going to talk about today?

(student) We are going to talk about _____.
(This is what the children should be saying)

2. (teacher) How do you know this is a _____?
What tools or equipment does a _____ use?
What does a _____ wear ?
Why does a _____ wear _____?

3. (teacher) Do you know anyone who has this job?

There should be individual answers from the children. Keep the children on the subject, talking one at a time. Always encourage them to use complete sentences. Encourage the children to bring in illustrations from home. (For example, My dad is a _____. My mother is a _____. I have a sister who is a _____., etc.)

4. (teacher) How many of you would like to be a _____?
Why or why not?
Can (and here the teacher would call on a specific boy or girl's name in the class) be a _____? (The strategy here is to get the children to see that both boys and girls can perform in that particular occupation.) Other questions to help out might be why or why not questions. The teacher should point out that it makes no difference if the person is a man or a woman.

5. (teacher) Why is it important that we have _____?
What would happen if we didn't have _____?

ME DOLL ACTIVITY

Materials

Me Doll
Clothing that represents the individual occupations

Procedure

1. Present the Me Doll to the children while it is dressed in the everyday clothing.

2. Have the children pass the Me Doll. At the same time have them respond to the question:
   Who do you see?

3. Display the clothing of the particular occupation to be discussed that day.
   Who would wear this uniform or set of clothing? (As the children respond have two children dress the Me Doll in the appropriate clothing.)
   How do you know this clothing would be worn by _____?
   Do all _____ wear uniforms or clothing like this?
   Why or why not?

4. Once the doll is dressed in appropriate clothing have the children pass the doll a second time.
   Who do you see?
   What is your job or occupation?
   Have children respond to second question with a sentence.
   I am a _____. My job is to _____.
   Example: I am a pilot. My job is to fly airplanes.
   If a child chooses to elaborate beyond the two questions allow him/her to do so.

5. Point out that both sexes are capable of performing a specific occupation.
   When _____grows up can she/he be a _____?
   Why or why not?
   If your father/mother wanted to be a _____ would that be all right?
   Why or why not?
   If your sister/brother wanted to be _____would it be all right?
   Why or why not?

SOCIO / DRAMATIC PLAY

Dramatic play allows a child to use his/her imagination. A child can be anyone or anything she/he wants to be. Dramatic play permits a child to emerge from the experiences of being a child into the world of adults. It is serious playing of their perceptions of adult roles.

Not all children at this age are ready for an organized role playing experience. A child may decide to watch rather than participate, so allow a child ample time to become accustomed to the situation.

The following individual units describe potential situations. Be sufficiently flexible to allow the children to direct the experience.

Encourage children to participate in non-traditional roles. Emphasize equality within the occupations. Do not segregate groups by sex.

Behavioral Objectives

1. Active participation
2. Ability to work together
3. Verbalizing actions - I am a _____ (pilot, nurse, etc.)
4. Communicating actions to others - You are the _____ (copilot, doctor, etc.)
5. Use of complete sentences

The role playing activities are designed with one or more procedural outlines. Using your own judgment choose the procedure(s) you feel the children are capable of handling. Feel free to allow the children to design their own role playing activity within the occupation, with the exception of sex role stereotyping.

Materials

1. Nurse/Doctor
   Shots, stethoscope, pressure cuff, caps, gowns, band-aids
2. Mechanic
   Trucks, cars, ambulance, police car, garage, tools (wrench, screwdriver, pliers)
3. Construction Worker
   Hard hat, building equipment (blocks, boxes, anything that can be built), tools (hammers, saw, screwdriver), trucks
4. Teacher
   Chalk, chalkboard, books, pencils, paper
5. Flight Attendants/Pilots and Co-pilots
   airplanes, airport materials

Unit #1 Introduction

This unit focuses on increasing the child's awareness of his/her own roles within the family. Specifically:

1. The child will describe his/her role within the family and how it lends itself to the functioning of the family.

2. The child will be able to identify the jobs of members of his/her family and describe them.

3. The child will be able to verbalize his/her own career aspirations.

The unit also introduces the six occupational clusters that will be developed in the following six weeks. (The final week will bring the occupational clusters together in a summary fashion).

1. police officers
2. mechanics
3. nurses and doctors
4. construction workers
5. teachers
6. airline personnel

Session #1

Developmental Objectives

1. To discover different occupations available to a person
2. To find out what "I" want to be
3. To find out the different jobs members of my family do and the job I do.

Behavioral Objectives

1. Child will be able to tell the group what his/her job is at home.
2. Child will be able to tell the group what his/her parents jobs are.
3. Child will be able to say his/her name and tell his/her occupation aspirations to the group. The individual children should label their occupation interest without copying another child's response.

Materials

Book and/or record that depicts at least the six careers. (Example: Children's Dictionary of Occupations by Hopke and Parramor. Philadelphia: Career Futures, Inc., 1977.)

Unit #1

Session #1 cont.

Activity

When I grow up I want to be:

1. Encourage children to discuss their career interests and their ideas of what constitutes an occupation.

2. Ask the children what their jobs are now. What are the jobs of their parents and other people in their family? Try to get a response from every child.

3. Introduce the Me Doll. (Me Doll dressed in street clothes). Have the children pass around the Me Doll. As each child looks into the mirror have him/her say his/her name and tell what she/he would like to be. (My name is _____ and I want to be a _____).

Unit #1 cont.

Session #2

Developmental Objectives

1. The child will be able to match the Robot cards pictures occupation and materials with minimal help.

2. To become aware of some of the occupations available to people in our society.

Behavioral Objectives

1. The child will be able to name the different careers depicted in the Robot card game.

2. The child will be able to name the equipment or tools used by people in the occupations depicted on the Robot card game.

3. The child will be able to choose one occupation from the Robot card and tell why that occupation is important to him/her.

4. When valid the child will be able to tell the group when a depicted occupation is one his/her parent does.

Materials

Robot card game.

Questioning Strategy - Review topics from Session #1

1. What are some of the occupations that we can choose for ourselves when we grow up?
2. Is it all right for a boy to be a teacher? How about a nurse? Can a girl be a doctor? Can a girl be an airline pilot?

Activity

1. Introduce the Robot matching game. Have the children match occupation to equipment used by the people in that occupation. Once children have completed their matching evaluate for correctness and then have each child pick one occupation from his/her card and discuss why the objects and cards go together. Encourage children to pick an occupation that is of interest to them and have them explain why it is important to them.

2. Encourage children to discuss the different occupations, pointing out the options that are available to people in our society. Emphasize the importance of choosing an interesting occupation that is important to an individual regardless of his/her sex or his/her cultural/ethnic/racial background.

Developmental Objectives

Police officers are important people in our society. Police officers arrest and control criminals but they also help us in times of need.

Behavioral Objectives

1. Child will be able to identify a police uniform and why s/he wears one.

2. Child will recognize and label three pieces of equipment used by a police officer and why or how it is used.

3. Child will describe a situation where a police officer would be.

Materials

Badge, handcuffs, police car

Procedure I

Being lost. Have individual children take turns being the lost child and the rescuing police officer. Have children act out roles.

Questioning Strategy

1. What does a police officer need to know before s/he can take you home?

2. How does it feel to be lost?

3. How can a police officer make you feel better until your parents come to find you?

Procedure II

Enforcement of the law. Set the scene by deciding on an appropriate crime. Choose a crime that is familiar but yet less violent than most. Robbery (such as a car theft or a store robbery) are good choices.

Questioning Strategy

1. How does a police officer arrest a criminal?
2. How does a police officer treat the criminal?
3. What does s/he do with the criminal?
4. How does a criminal feel toward the officer?
5. What are some of the things the criminal will tell the arresting officer?

Unit #2
Session #2 Socio/Dramatic
Police Officer, cont.

Procedure III

Encourage children to create a scene or situation that depicts the helping skills of the police officer. Examples: finding a lost child, traffic control, help when family car breaks down and speeding tickets.

Unit #3
Session #2 Socio/Dramatic
Mechanic

Developmental Objectives

Automobiles are machines that require routine repairs much like our own bodies. Children will become more familiar with the different services which involve a mechanic.

Behavioral Objectives

1. Child will identify (recognize) tools used by a mechanic.
2. Child will understand why a mechanic must wear special clothing.
3. Child will be able to recognize and label two aspects of auto repair.

Materials

Designate the mechanics and the car owners--utilize police badge for person driving police car.

Mechanic will begin activity by requesting information on what is wrong with the car. Owner will describe car's ailment--encourage common problems that children can be familiar with. Examples: flat tire, out of gas, needs body work after minor fender bender, motor problems, etc.

Children will probably be unfamiliar with the role of mechanic and may need to be reminded of the many different responsibilities of a mechanic.

Procedure II

Filling station. Have children take turns driving their cars into filling station. Mechanic will fill up with gas, wash windows, check oil, etc.

Procedure III

Provide ample space and unstructured setting. With materials provided encourage children to create as they remember their experiences with cars and car mechanics.

Unit #4
Session #2 Socio/Dramatic
Nurse/Doctor

Developmental Objectives

Doctors and nurses help keep us healthy. They help us prevent illnesses and injuries. They cure or help heal illnesses or injuries.

Behavioral Objectives

1. Child will be able to identify medical clothing worn and why such clothing is worn.
2. Child will be able to explain two duties of doctors and two duties of nurses.
3. Child will recognize two or three instruments used by a doctor and/or nurse. Child will be able to explain one instrument's use.

Materials

Stethoscope, pressure cuff, caps, gowns, bandages, plastic syringes, reflex hammer.

Procedure I

Check-up. Designate children to be nurse, doctor and patients. Have children decide what procedure should be followed based on their own experience. Some children will identify only with the shot aspect of the doctor's office. Other children may be familiar with other tasks: checking pulse, listening to the heart and lungs, testing reflexes, etc.

Procedure II

Make believe hospital visit. Designate children who will be patients, doctors, and nurses.

1. Having babies--use dolls for infants
2. Injuries that require cleaning and bandaging
3. Illnesses, etc.

Nurses will clean injuries, check blood pressure, give shots, and in general make the patients more comfortable. The doctor(s) will help nurse clean and bandage injuries, listen to the patient's heart, instruct the nurses, etc. Children may attempt to be all action and no words. Encourage children to communicate to their "doctors," "nurses," and "patients."

Unit #5
Session #2 Socio/Dramatic
Construction Worker

Developmental Objectives

To learn about themany kinds of construction workers in our world. Many construction workers are specialists working on only certain types of buildings.

Behavioral Objectives

1. The child will identify equipment used by a construction worker.
2. The child will identify two types of constructionwork.
3. The child will explain the need for safety equipment, specifically the hard hats.

Materials

Trucks, hard hats, tools, blocks.

Procedure I

Decide which two structures will be built: house, buildings, bridges, etc. Divide the children into groups of 4-5 to allow optimal involvement of each child. Designate two children to be chief engineers. They will carry clipboard. Designate two children to be truck drivers. Encourage the "chief engineers" to direct the construction of the chosen building. Children will be using blocks to construct buildings. Encourage balance. Truck drivers will deliver cement sand, or anything they consider necessary for building construction.

Unit #6
Session #2 Socio/Dramatic
Teacher

Developmental Objectives

1. To learn about my (the child's) teacher
2. To learn the role she/he plays in my (the child's) learning

Behavioral Objectives

1. Child will be able to identify teacher by name and describe a characteristic about the teacher. It may be a physical or behavioral characteristic.
2. The child will be able to describe the characteristics of a good teacher.
3. The child will develop an understanding of why we have teachers.

Materials

Books, ~~blaek~~board, chalk

Procedure

Give the children an opportunity to "teach" the class. Possibilities:
1. "Read" a story
2. Present a lesson using the chalkboard
3. Take class roll or whatever jobs teachers perform that are familiar to the children

Questioning Strategy

1. What are the skills a teacher needs?
2. What qualities do the children like about the teacher?
3. What characteristics do they dislike?
4. If you (the child) were a teacher what would you teach your class?
5. What services does your teacher provide for you?

Unit #7
Session #2 Socio/Dramatic
Airline Personnel

Materials

airplanes, airports

Procedure I Pilot/Co-pilot

Have children explore and manipulate the airplane.

Questioning Strategy

1. Where does the pilot sit?
2. What is the job of the pilot?
3. What is the job of the co-pilot?
4. Why do the pilot and co-pilots wear uniforms?
5. What does a person need to know or learn before she/he can become a pilot?
6. Can anyone be a pilot/co-pilot?
7. Why or why not?

Procedure II

Bring out airport. Allow the children to manipulate the airport.

Questioning Strategy

1. What is an airport?
2. Who works at the airport?
3. What do you do at the airport?
   a. Take a trip on an airplane
   b. Pick up relatives and friends who fly in to visit
   c. Pick up packages
   d. Observe airplanes coming and going
4. Where does the pilot/co-pilot park an airplane?
5. Why can't they park the airplane inside?
6. Is there a garage for airplanes like there is for a car?

Procedure III Flight Attendants

While the children are manipulating the airplane, turn the discussion to the occupation of the flight attendants.

Questioning Strategy

1. What jobs are performed by the attendants?
2. What might an attendant do for you as you board the airplane?
3. How can an attendant make you more comfortable during your airplane flight?
4. Can both men and women be attendants?
5. Why or why not?

Unit #7
Session #2 Socio/Dramatic
Airline Personnel Continued

The responsibilities of the airline attendant are fairly abstract. Concentrate on the helping skills of the attendant. They serve you meals and drinks, hand out pillows and blankets on long flights and evening flights. They help entertain children, pass out books and magazines, instruct you on the safety features of the airplane and they notify you about delays in landing and in general make your flight more pleasant.

Unit #8
Session #1
Summary: "What's Missing"

Developmental Objectives

Child will increase visual perceptual memory skills by recalling missing objects from the display of occupational toys and equipment.

Behavioral Objectives

1. Child will be able to take turns.
2. Child will be able to identify the occupation to which the equipment belongs.
3. Child will be able to describe the use of the equipment.

Materials

Toys and equipment representing the six groups of occupations (there must be at least 10 objects. One object per child, minimal).

Procedure

Place all toys and equipment in the middle of the circle. Start with one child and ask that child to label an object (either a piece of equipment or an occupational toy). Each child will have a turn, and each will label a different object.

Blindfold a child or have a child leave the room. Ask another child (or teacher) to take away an object and hide it. Bring child back or remove blindfold and ask the child, "What is Missing?"

Questioning Strategy

After the child identifies the object that is missing, give the child the object to hold.

"Who uses it?"
(A child should respond in sentence form. "A _____ uses a _____.")

"What does the _____ use the _____ for?"
(A child should respond, "A _____ uses _____ to _____.")

Encourage the child to discuss other aspects of the piece of equipment or object she/he is holding.

Then go on to the next child, until each child has had a turn and all have a different piece of equipment.

Unit #8
Session #2
Summary

Developmental Objectives

Facilitate eye-hand coordination through the use of puzzles.

Behavioral Objectives

1. Children will be able to identify occupations depicted in the puzzles.
2. Children will be able to work in pairs, if there are not enough puzzles for each child to have one.

Materials

Judy Puzzles: Pilot, mechanic, telephone linesperson (construction), nurse, teacher, doctor.

Procedure

Have children manipulate puzzles by first removing the pieces one by one. Do not allow dumping of the puzzles. Have the children replace the puzzle pieces.

Have the children individually discuss aspects of their puzzles that relate to the particular occupation of their puzzle.

Questioning Strategy

1. What occupation is your puzzle?
2. Is it of a man or woman_____?
3. Is that all right?
4. Why or why not?
   (Follow lead of children to assure them that it is all right for women and men to do all of the tasks)

PRESCHOOL MODULE REVISIONS

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The preschool class included 10 boys and nine girls who were divided into two mixed groups. The preschool session began one week prior to the careers lessons and ended one week following our intervention. Experimental teachers were introduced to the class as members of the regular preschool staff. Further, experimental teachers were present during some of the other classroom activities, hence, were not readily identifiable as conducting an experiment in the classroom.

Upon their arrival each morning, all children were directed to whole group activities at a rug area. Following the rug activity there were small group activities at which time the "Careers" group was taken to another room next door. Initially, children objected to this schedule since the small group activities usually involved production of a take-home item. However, once the children were convinced everyone would have "careers" and small group activities but on different days, the discomfort subsided. Whole class lessons would eliminate this minor problem.

The transition from the regular classroom to the "Careers" room posed a problem each day but it also provided a disengagement from previous activities. The male and female researchers presented each lesson jointly.

The original modules describe an introduction with the Me Doll and flannel board figures (module, page 5), followed by different second day

activities for each occupation (modules page, 10, 11, 12, 13, 14, 15, 16, 17); review activities are also listed (module pages 18, 19). To facilitate daily usage, we rearranged the modules into a cookbook format with first-day and second-day activities enumerated for each occupation. The activities remained as described in the original module, only the order of pages was changed to suit personal whim.

As an aside, the module calls for police badges and handcuffs. Metal equipment either was unavailable or deemed unsafe for small children. Plastic equipment was worthless because the badges and handcuffs were not durable enough for multiple usage. Toys and equipment should be purchased with durability in mind.

Each group had identical activities: Monday and Tuesday lessons were repeated on Wednesday and Thursday with the other group.

WEEK ONE

Unit One: Introduction

Day 1: The flannel board figures worked very well. Children liked placing the figures upright themselves and were eager to associate figures with occupation labels. These labels must remain constant throughout the lesson or strong objections will be voiced.

Male and female figures were shown for each occupation, along with the appropriate label. Those who could not read (most of the group) were pleased to use the labels. A couple of boys in each group said women could not be doctors or police officers and males could not be nurses ("Doctors wear ties, nurses wear dresses"). Although no support for this position was offered when probed, the boys remained adamant. Girls readily admitted

women could be in the various occupations although most said they wanted to be mothers or nurses or teachers themselves. One girl wanted to be a pilot. No one voiced objection to that, including the boys who felt women could not be doctors or police officers.

Day 2: For our use the Me Doll was not effective. I suspect our training and imaginations were inadequate, for we never did get the responses we hoped to elicit. The Me Doll clothing was excellent for its purpose, modeling the uniforms of the occupations, but too many children became fidgetive while others were using the Me Doll. Individual use of the Me Doll, talking to it, dressing and undressing it, seemed more effective than group use. Other teachers may have a different experience. The Me Doll is useful and should be considered for adoption.

The Robot Card decks were popular in playing Concentration or Fish. Many of the occupations were unfamiliar and needed explanation. Homemaker is not depicted in the Robot Card deck. Only a few jobs had matching equipment in the flannel board set. Matching activities require prior drawing of appropriate equipment for each occupation.

Note: As previously mentioned, the Wednesday and Thursday activities were a repetition of Monday and Tuesday, using the other group of children. The activity descriptions will not be repeated, all suggestions and comments are included in the activity descriptions.

WEEK TWO

Unit Two: Police

Day 1: The group was divided into two groups. One half listenened to a story about a police officer's activities, while the other half had a teacher-led discussion regarding police uniforms, equipment and activities using the flannel board.

Day 2: For socio-dramatic play the class was directed to form a semi-circle and participate in a flannel board story about how to help a lost child. Then individual children, who volunteered, were assigned roles of police officer and lost child and asked to act out the flannel board story. Several boys had difficulty with the distinction between police-man and police officer.

WEEK THREE

Unit Three: Mechanic

Day 1: The class discussed the skills of a mechanic using the flannel board and a set of automotive mechanic tools (teacher's). Tools were named, passed around and described.

Day 2: Upon entering the room the children could choose between a Fisher-Price Play Garage and a table with large nuts and bolts in a board and open end wrenches. The female teacher modeled the nuts and bolts activity. The distribution of genders in the activities was about even. Frequently, a child would move from one activity to another. A couple of boys who had done both activities quickly sat with the male teacher and used the Me Doll, changing uniforms and telling a version of the previous day's discussion.

WEEK FOUR

Unit Four: Medical

Day 1: Using the flannel board and Me Dolls, the difference in responsibilities, training and skills between nurses and doctors was explained. Several boys and a few girls felt women probably could not be

doctors but men certainly could not be nurses. "Doctors wear ties, nurses wear dresses." That some children had been to female doctors did not dissuade any one from that view point.

Following the discussion the children were encouraged to use the equipment and uniforms available for the remaining few minutes.

Day 2: The equipment and uniforms were available in the room again. The children were particularly interested in administering "shots" to each other and using the otoscope (with supervision). One boy was quite demonstrative in bathing, diapering and carrying a baby doll. Several girls also made these motions but made no attempt to draw attention. The boy who was most adament about the notion that males could not be nurses refused to play a nurse role but was eager to play a doctor role.

WEEK FIVE

Unit Five: Construction

Day 1: At the flannel board children were led through the interactions of the people necessary to build a house: architect, surveyor, cement mason, bricklayer, carpenter, electrician, plumber and painter.

Day 2: In the room were activity centers which consisted of an Erector Set in one area, a work bench area with hammers, saws, boards and nails (require close supervision), and the flannel board and Me Doll in a third area. Erector Set use was modeled by the female teacher.

WEEK SIX

Unit Six: Teacher

Note: In weekly planning meetings of the project staff we decided to not do testing during the review unit in order to avoid primacy-recency effects as much as possible. To adjust the schedule accordingly, the

teacher unit was dropped and airline and review units were moved forward one week each, leaving a three-day final week for testing the experimental group. We felt, of all the units, teachers were the most familiar to the children.

It should be noted, however, the module activities for socio-dramatic play require advanced preparation beyond this age groups' capabilities. The questioning strategy is adequate, the procedure section is not.

WEEK SIX

Unit Seven: Airline

Day 1: With the flannel board as a basis, pilots and flight attendants were discussed. Several children related their flight experience, including one who remembered a male flight attendant. The same boy who insisted nursing is female-exclusive behavior also felt women could not be pilots.

For this lesson the questioning strategy particularly was effective, prompting many questions.

Day 2: Half the group played with the Fisher-Price Airport while the other half used large felt marker pens to draw an airplane with themselves as pilot. After 10 minutes the halves alternated activities. During the airport play many children made appropriate responses to questions about pilot and flight attendant responsibilities and skills.

WEEK SEVEN

Unit Eight: Review

Day 1: The module lesson, "What's Missing," suggests the procedure continue until each child has had an opportunity to identify a missing item. Due to time limitations this procedure was not used although it

worked well in another class (with modifications) with longer time allowed. Instead of "What's Missing?" we used one item from each unit as the focus of questions on necessary skills and equipment for each career.

Day 2: The Judy and PACT puzzles were distributed on two separate tables. Children were free to work alone or together on the puzzles of their choice. The questioning strategy worked well.

GENERAL COMMENTS

If the teacher is familiar with the Me Doll and comfortable in the process of using the Me Doll as described in the module, it should be an effective teaching tool. For individual play and questions the Me Doll is very useful, even for those whose use of the doll in a group was not successful.

Career units should include as many parents' occupations as possible. Many preschoolers have incomplete or no knowledge of their parents' occupations. A homemaker unit should be developed.

Gender stereotyping is pervasive in some preschool classrooms. Boys should not be the only ones assigned to picking up blocks and cars and trucks. Girls should not have exclusive use of the homemaking toys. The books, records, puzzles, murals, illustrations and songs used in preschool classes should be examined for gender stereotyping. Many of these materials are old and quite blatant about gender assignments. Of course, teacher attitudes are of prime importance in fostering or overcoming gender stereotypes in the preschool class.

Preschool--8 weeks, 2 groups per week, two days per week, 20 minutes per day

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
Unit 1 Introduction	G1. Flannel Board Introduction	G2. Me Doll Robot Cards	G2. Flannel Board Introduction	G2. Me Doll Robot Cards
Unit 2 Police	G1. Flannel Board Story	G1. Lost Child	G2. Flannel Board Story	G2. Lost Child
Unit 3 MEchanic	G1. Flannel Board	G1. Tools and Toys	G2. Flannel Board	G2. Tools and Toys
Unit 4 Medical	G1. Flannel Board Equipment	G1. Equipment	G2. Flannel Board Equipment	G2. Equipment
Unit 5 Construction	G1. Flannel Board	G1. Tools	G2. Flannel Board	G2. Tools
Unit 7 Airline	G1. Flannel Board	G1. Draw a Plane Airport	G2. Flannel Board	G2. Draw a Plane Airport
Unit 8 Review	G1. Equipment	G1. Flannel Board	G2. Equipment	G2. Flannel Board

POST TESTING INTERVIEW WITH PRESCHOOL SUPERVISING TEACHER*

Q: Which materials were popular?

A: Far and away, the PACT puzzles were the best toys. They were durable, easily used without supervision. The board puzzles were dumped in a single pile which four or six children would use in completing puzzles alone or in pairs. The children freely commented about the occupations depicted. The Mix and Match Lotto was also very popular, especially in Concentration. A couple occupations were unfamiliar (Coast Guard, interviewer, recreation director, dental assistant, pharmacist), but easily explained. The Generation Puzzles were easy once the age distinction was noted, but the labels were difficult for the nonreaders.

Robot Cards were useful for individual games of Concentration but the deck was too large, separating out about six pairs worked well. Tinker Toys and Erector sets were popular but girls seemed to avoid the Erector sets even when boys were not nearby.

Q: Which materials were unpopular?

A: The plastic doctor kit and any plastic trucks or cars were junk. They quickly were broken. Without supervision plastic toys should not be used. The plastic axles of the Erector set also broke easily.

Q: Are there any careers you would add or delete?

A: Yes. Every child should learn what their parents do. I would make a concerted effort to modify the kit to include the particular occupations for each class. This includes a needed unit on homemaking skills.

Q: What other changes do you suggest?

A: More male models are needed in preschools I believe. Most of the materials (books, pictures, songs) we have reflect gender stereotyping. The PACT puzzles were good but we need more nonstereotypic materials.

*The regular teacher of the class in which researchers presented modules was interviewed.

TEACHING MODULE

FOR

EXPANDING OCCUPATIONAL AWARENESS OF SECOND GRADE CHILDREN

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EXPANDING OCCUPATIONAL AWARENESS OF SECOND GRADE CHILDREN

This nine-week modular unit has been designed to expand the occupational awareness of second grade children. The individual and group activities were planned to increase the children's awareness of available occupational options and that interest and ability are the critical factors in selecting an occupation, not one's sex or race.

The activities will help the children to develop an awareness of a number of facets of the work world, including work done at home by family members and that done out of the home by family members. Six occupational career clusters are presented, and the interrelationships between some of the occupational clusters are explored.

As the students consider the various occupations they will begin to think about what they might like to do when they are older. While personal preferences, interests, ambitions and skills are essentially left up to the individual child to mull over, it is these factors that are pointed out as being important in selecting an occupation, not one's sex or race.

The module has been developed to provide four different 30-minute activites per week. The size of the class and the number of teachers present will dictate the size of each group that will work on an activity. We suggest dividing the class in four, if the resources (materials and teachers/teachers aides) are available. The groups should be half boys and half girls. In a situation with four groups, each group would begin with a different activity (groups 1-4). The second day, group one would do the group two activity, two the third group activity, and so on. In four days each student would have had the opportunity to be involved in each activity. Obviously, the teacher may wish to divide a class into small groups, or in a very small class, utilize the entire class as a group. We recommend the maximum number of students in each group not exceed 15, and each group will need a teacher or teachers aide. As group personalities emerge and the individual units take shape, the teacher(s) may wish to modify the units (called groups in the module) to fit the needs of the children in order to reach the outlined objectives.

Many of the activities have been designed for the individual student to place in a notebook of occupations.

OVERVIEW/INTRODUCTION

Behavioral and Instructional Objectives

1. To use terminology associated with people's life work, such as job, vocation, career, occupation.
2. To name various occupations and careers.
3. To discuss the fact that ability does not depend on sex or race.
4. To demonstrate and develop skill in handling cards in a game--following rules.
5. To show skill in visual matching.

6. To understand the concept of a robot.
7. To understand occupational interdependence
8. To role play an occupational role
9. To understand that various occupations require different kinds of training and amounts of education.
10. To identify some materials and tools used in various occupations, and describe why/how they are used.

Materials Needed

Robot cards
Our Helpers Play People
Community Careers Flannel Board
Lotto Game "Jobs"
Two rings for each student to bind notebook together
Tag board or poster board for notebook covers

Group 1

Robot Cards

Distribute cards and have individual children discuss the job displayed on the cards. Point out that both sexes are depicted on each card. Emphasize the importance of choice of job on the basis of interest or skill, not sex role stereotypes.

Play the game according to directions or play the game as you would concentration (need one set of cards per five children so that children will have ample opportunity to participate).

Group 2

Our Helpers Play People

Have children discuss the figures in relation to type of occupation, importance to community, interdependence of individuals within careers, etc. (e.g., a doctor cannot function well without a nurse, a mail carrier delivers mail easier where there are roads, police officers can help construction workers with necessary traffic control, etc.).

Encourage role playing with the figures. Role play the interactions between the occupations. Children can walk around with the figures. Boys can have girl figures, girls can have boy figures.

Group 3

Community Careers Flannel Board

Encourage girls and boys to act out various jobs which they would like to perform in the community. See general procedures on teaching guide sheet of flannel board.

Group 4

Career Lotto

Have children play the lotto game. Start discussion about the occupations depicted. What materials or equipment are used in each? Why? Stress skills needed in each occupation and importance of proper training. When discussing necessary training, talk about need for education and/or skill training.

Allow discussion of who (in accordance to sex) can perform the job. Can any child in the group work in these occupations?

CLUSTER FOR CONSUMER AND HOMEMAKING

Behavioral and Instructional Objectives

1. To develop self and family awareness
   a. To identify the roles family members play in carrying out the work that goes on in the family.
   b. Each child will identify and label the kinds of jobs and services each members of his/her family does and draw and describe his/her own job(s).
2. To understand that there are different types of families and that there is no one right kind of family life
3. To develop an awareness of the concepts of production and service as they pertain to family life. Each child will name services and products provided by the members of his/her family.
4. To realize that the jobs in a home are interchangeable. A particular service or a product does not have to be done or made by a particular sex.

Special Teacher Information

Definitions of services and products:

Service: Doing something for someone.
Examples: washing clothes, mowing the lawn, driving the car, fixing broken windows, cooking, fixing broken toys.

Products: Materials that are useful to people. In this case they are made (produced) by members of the family.
Examples: birthday cakes, homemade cookies, tree houses, pies, homemade clothes, vegetables from family garden, home improvement.

Materials Needed

Paper, pencils, crayons or paints, magazines, scissors, paste, paper.

Group 1 Self-Awareness

Procedure:

1. Draw a picture of you--describe yourself (hair, eyes, color, how tall, boy/girl).
2. Draw a picture of what you would like to be someday--describe your picture. Child will write description and date on drawings. If time permits, encourage children to discuss their picture. These will begin the child's notebook.

Group 2 Family Awareness

Procedure:

Have each child make a collage of his/her family that demonstrate a particular aspect of his/her family life.
Examples: family members in typical family interaction, family members in work activities inside the home, and family members in work activities outside the home.

Teacher circulates and discusses with each child the concepts of products and services in relation to the type of collage she/he is making.

If time permits, ask each child (if she/he wants) to tell about his/her collage.

Group 3 Self-Awareness: My Jobs at Home

Procedure

1. Write down all the jobs/services you provide for your family.
2. Draw you doing your favorite job. Describe (in writing) what you are doing and why you like this job the most.
3. Draw yourself doing the job you hate the most. Describe (in writing) what you are doing and why you hate this job.

Children should write out descriptions and date papers. These will go in their notebook.

Group 4

Procedure

Draw your family members and label who they are and the service or product they provide for the family. If they provide more than one product or service you can draw pictures for all the services or products they provide.

Teacher circulates and discusses with each child the concepts of services and products in relation to the picture being drawn.

CONSTRUCTION CLUSTER

Behavioral and Instructional Objectives

1. To understand that the concept of construction involves the interdependence of many jobs within the occupational cluster.
2. To understand that buildings or structures are built to provide certain functions; to describe the importance of particular structures, their use and reasons for a particular design.
3. To work cooperatively to build a structure.

Rationale: Buildings come in different sizes and shapes. Buildings can be made from a great variety of materials. Many different occupational skills are needed to construct a building.

Materials Needed

Basic Erector Set
Glue, toothpicks, and styrofoam packing stapes (u's, s's, etc.)
Crayons and paper
Dictionary of Occupations (Children's Dictionary of Occupations)
Flannel Board Figures
- 2 women and 4 men in work clothes
- 1 woman and 1 man in street clothes
- Props: shovel, toolbox, building materials, front loading tractor
- Blank name cards

Group 1

Label the blank name cards, and place them appropriately under the flannel board figures. suggested construction occupations are: brick layer, carpenter, surveyor, architect, cement mason, electrician.

Ask the children to describe the occupation of each figure. What does each worker do?

Bricklayer: builds walls, floors and chimneys from brick.
Carpenter: puts up walls, floors, ceilings, rafters, etc. from wood. Uses nails, saws, hammers, etc. as tools.
Surveyor: measures plots of land for building sites, lays out roadways, etc. Uses maps, transit, etc.
Cement Mason: mixes, pours, and smooths and concrete work in buildings, such as foundations, walls, etc., and roads.
Architect: designs buildings. Draws the plans that the other construction workers use, such as electricians, plumbers and carpenters.
Electrician: installs the electrical wiring system to provide lights, electricity to run appliances, electric heat, etc.

Discuss the equipment utilized by the workers in each occupation. What tools are not depicted that might be used?

Discuss the sequence of the construction of the building. Who would do what and when? Get the children involved in playing the various occupational roles. Examples of ways to get the children thinking are:

1. John, the architect, has designed a building too large for the plot of land. What might Susy (use the names of the kids in the group) say to the architect? What actions might the architect take? (Get more land, design a smaller building, make the building taller and skinnier.)

2. A house is under construction. The foundation is in. Judy, the bricklayer, comes in to put in the fireplace but there are no walls! What might happen? What needs to be done before the fireplace can be built?

Group 2

Cover work space with newspapers. Teacher may want all to use smocks. Each child uses glue, toothpicks, and the styrofoam to create a building. Have children label their buildings and leave them in the classroom to compare differences. Ask each child to explain his/her structure to the rest of the group. Have children list on paper all the different materials of which a building can be made. Place into their notebook:

Buildings can be made from:

(children list: brick, wood, etc.)

Group 3

Using crayons and paper have each child choose one or two structures that she/he would like to build and have the children draw it (them). Have children describe their structure, its use, value to society, etc. Place in notebook. They should use complete sentences.

Group 4

Using Erector Sets have children work in groups to build (construct) a structure. Encourage different buildings (ie, hospitals, houses, bridges). While the children are working on their buildings, the teacher circulates from group to group. In each group the teacher utilizes the following questioning strategy to assist the children in talking about types of materials they would actually be using if they were really building the structure, construction occupations involved, and reasons for designing structures in a particular way. For example, suppose one group decides to build a hospital.

Questioning Strategy:

1. What materials would you use to build your hospital? Why?
2. What construction workers would be employed? (The Dictionary of Occupations could be used to see which workers they would have to use. See Career Clusters index at end.)
3. Who would use the hospital? Why?
4. Why is a hospital designed the way it is? Why do you need elevators instead of only stairs? Why do you need wide doors in a hospital? Why do you need a sterile environment? Why do you need an X-ray room? Why do you need a maternity ward? Why do you need an alternative energy system (a backup generator)? Why do you need a large parking lot?

HEALTH OCCUPATIONS CLUSTER

Behavioral and Instructional Objectives

1. To be able to identify careers in the health occupation cluster.
2. To be able to describe job responsibilities of individuals in health occupations
3. To show an understanding of the interdependence of jobs within the health cluster
4. To be able to identify careers that require extensive training and careers that require less training and why
5. To indicate an understanding that the division of labor in the health field is by interest and training, not according to sex
6. To be able to identify and describe the function of equipment used by people in the health careers

Materials Needed

Health Crossword Puzzle
Keeping Well Worksheet
Doctor's Bag
Health Equipment Worksheet
Health Career Clusters Worksheet

Group 1

Procedure:

After the children have completed the health crossword puzzle the teacher raises questions about the jobs of each of the occupations (who does what) and their interrelationship. (Puzzles go in notebook.)

Questioning Strategy:

1. What does a hygienist do?
2. What does a dentist do?
3. Why does a hygienist work in a dentist's office?
4. What does a doctor do?
5. What does a surgeon do?
6. What does a nurse do? A nurses aide?
7. Do they work in the same place?
8. How do they help each other out?

Group 2

Hand out the Health Career Cluster Activity worksheet. Instruct students to fill in the rectangles with the titles of the occupations that they think women do and those they think men do.

Discuss what people in each occuatpion do, what their responsibilities are, and have the children defend their choice of careers for women and men. The children's should come to realize that a person's sex is not what is critical in determining a career. The important factors are whether or not a person has the qualifications for a job and finds the job self fulfilling. Instruct the students to cross out women and men and substitute the word "people" in their places. Put in notebook.

Group 3

Distribute a Health Equipment Worksheet to each student. Starting with the first piece of equipment (syringe), ask how it is pronounced, what it is, and who uses it. Have children come to some consensus about whether a certain piece of equipment can be used by more than one professional.

Work into the discussion that both men and women can be doctors and nurses and hygienists and dentists. For example, if both a doctor and a nurse use the same piece of equipment, doesn't that mean that both women and men have equal ability? Therefore, shouldn't they have equal chances of choosing either career? Place worksheet in notebook.

Group 4

Directions for "Keeping Well" worksheet:

Have the children print the names of the health occupations according to the code listed at the top of the sheet. If some students get finished ahead of time they could draw one of the careers depicted in the questions on their page.

Questioning Strategy:

The person that delivers a baby is an obstetrician. Have class repeat "obstetrician."
Who has the babies? (the mother or women)
Is it all right for the obstetrician to be a female? If not, why not?
Is it all right for the obstetrician to be a male? If not, why not?

Use a similar format for the rest of the questions. The important thing to emphasize is that it is all right for either males or females to hold these jobs.

Have children place worksheets in their notebooks.

PUBLIC SERVICE CLUSTER

Behavioral and Instructional Objectives

1. To gain an understanding of what public service means and of the importance of public service in their community
2. To identify occupations within the public service cluster
3. To identify buildings where public service occupations are housed
4. To describe the jobs performed by an individual in public service occupations
5. To demonstrate an understanding of the concept of a career ladder and the interdependence of all occupations utilized on such a career ladder
6. To discuss the fact that ability to perform in a public service occupation does not depend upon sex or race

Materials Needed

Paper and pencil
Worksheets (Ladder of School Personnel and Public Service World of Words)
Our Helpers Play People

Group 1

As a group, the children will list public service buildings on the chalkboard. Each child will then draw one of these buildings (of his/her choice). She/he will list the types of jobs that are performed in his/her building and who does those jobs. Students place their work in their notebook.

Teacher will mingle among children, questioning and giving suggestions according to the child's needs, as the child is drawing.

Group 2

This exercise utilizes the career ladder (Ladder of School Personnel) to illustrate the levels of jobs in an educational setting. Each job requires specific skills and educational backgrounds. Ask students to list the responsibilities of each position, if time permits, or if individual students finish early, they can list them. Put completed worksheet in notebook.

Group 3

Hand out the worksheet titled, "Public Service World of Words." Have the students elect the appropriate occupational title from the list on the bottom of the worksheet page and print it in the balnk.

After children have completed their worksheets go over the correct answers and discuss the service aspect of each question. Put in notebook.

Group 4

Materials Needed:

The following "Our Helpers Play People": Police, postal worker, business workers. The business workers basically wear street clothes, and thus can depict several public service occupations such as librarians, meter readers, lawyers, and bank workers.

Identify occupations depicted. Point out that both men and women work in these occupations.

Questioning Strategy:

1. Can women be police officers, postal carriers, etc.? Why or why not?
2. What jobs are performed by the individuals in these occupations?
3. What equipment do they use? Why?
4. What occupations require a uniform?
5. Why is the uniform important?
6. Can a person be a police officer and not wear a uniform? Why or why not?
7. What situations can you think of that would require the assistance of a police officer, mail carrier, librarian, lawyer, etc.?

TRANSPORTATION CLUSTER

Behavioral and Instructional Objectives

1. To identify careers in the transportation cluster
2. To discuss how transportation has changed over the years and how transportation will change in the future
3. To choose a transportation career for his/her self on the basis of interest not sex
4. To discuss job responsibilities as they relate to jobs in the transporation cluster.

Materials Needed:

paper
pencils
crayons or felt marking pens
paints
poster board
magazines, newspapers
Moving on worksheet
Making Tracks worksheet

Group 1

The teacher could facilitate this activity by listing occupations in the transportation cluster on the board and discussing what each one is. The teacher can refer to the Career Cluster Index on transportation in the back of the Children's Dictionary of Occupations.

Have children draw themselves in a transportation career/job of their choice. "If you could be anything you wanted in the transportation field, what would you be?"

Students should label their pictures with a sentence. "I am a _____."

Select several children to discuss their chosen jobs. Encourage discussion about how it is all right for both males and females to do each of these jobs. Put all pictures in their notebooks.

Group 2

Using the worksheet, "Moving On," ask the children to discuss how and why transportation has changed since the time of their great-grandparents.

As a group they can discuss the transportation jobs in the past, the present and the future and write them on their worksheets.

If time permits they can list the new skills that will be needed by people in the transportation field in the future on the back of their worksheets. Add this worksheet to notebook.

Group 3

Children will create a collage that depicts people involved in various aspects of the transportation industry. Pictures cut from magazines might depict conductors, pilots, mechanics, bus drivers, longshore workers, etc.

During the construction of this collage encourage discussion of what the jobs are, and who does them. Emphasize that males and females can do the same job.

The collage will go in their notebook of occupations. The teacher may want to display the collages around the room for the week of the transportation cluster activities before putting them in their notebooks.

Group 4

Hand out the "Making Tracks" worksheet and instruct the children to use the code to answer the questions.

Upon completion, go over each question helping with pronunciation of each job title. The teacher might wish to discuss, depending upon available time, the other jobs each person does. Emphasize that both men and women are capable of doing each job. Note that even in number 5, track crew leader, no physical labor is required. However, in those occupations such as actually laying the track the important factor is physical strength, not sex. Both strong men and women are capable of doing this job, but neither weak men nor weak women will do it well.

Place this worksheet in their notebooks.

COMMUNICATIONS AND MEDIA CLUSTER

Behavioral and Instructional Objectives

1. To identify careers in the communication and media cluster.
2. To understand that ability does not depend on sex or race
3. To discuss the difference between media careers and communication careers.
4. To discuss the interdependence of communication and media careers.
5. To identify the importance of communication and media to our society.
6. To identify equipment utilized by people in communications and the media occupations and how the equipment is used.

Materials Needed

Communications and media cluster worksheet
Communications and media puzzle worksheet
Teletrainers

Group 1

Hand out "Communications and Media Cluster" worksheet.

Teacher will ask students for examples for each of the various careers. Teacher writes down job titles on chalkboard. Students discuss the job description for each job and write it on his/her page.

During this procedure teacher should be aware of sex-typing that might creep in. Correct for this. Examples might be given of female newscasters and radio personalities, i.e., Barbara Walters, the weather person, commercials with women and men. Put worksheet in notebook.

Group 2

Teletrainers need to be reserved from the local phone company at least a month in advance and teachers need to familiarize themselves with how they work so they can set them up for classroom use.

For this role playing exercise, select an equal number of girls and boys to be the actors. The remainder will be the audience. Ask who wants to play: homeowner, neighbor, switchboard operator, repairperson or installer, repair office worker. Avoid sex role stereotyping in casting.

Situation: Phone is not working. Homeowner goes over to a neighbor to call. Who does she/he call? The repair office, where the homeowner gets the switchboard operator and explains the problem. The switchboard operator switches the homeowner to the service department. The repair office worker contacts the repair person who comes out to make the necessary repairs. The homeowner calls the neighbor to let the neighbor know the phone is now working, and to thank the neighbor for the use of his/her phone.

If time allows, role play a similar situation with the other kids--four to six at a time.

Group 3

This session focuses on distinguishing between the concepts of media and communication, how important both are to us in America and the interdependence of the media and communications networks. Give the children problem solving situations to discuss.

Questioning Strategy

1. Suppose we had no radios, TV's, or newspapers. (These are the media system, as are movies, etc.) Could we still communicate? (Of course we could.)

   How? By talking and listing to each other, by using the telephone, telegraph, and writing letters. How would our lives be changed? Would we know what was happening in other parts of America or the world? What about weather reports?

2. Suppose we had no telephones. How could we communicate with friends and people we wanted to do business with around the state, country and world?

   (Ideally, the children will recognize the importance of the mail system, and also recognize the time factor difference in mail versus telephone communication.)

Group 4

Pass out the "Communications and Media Puzzle" worksheet. When the children are done, go over the right answers. Discuss the job in terms of whether the item (answer) is a piece of media or communications equipment or a job in communications or the media.

As the children decide on the right answers to the above question, the teacher should correct for any occupational sexism that occurs.

Put worksheet in notebook.

BUSINESS AND OFFICE OCCUPATIONAL CAREER CLUSTER

Behavioral and Instructional Objectives

1. To identify careers in the business and office cluster.
2. To develop the awareness that career interests are not based upon sex or race.
3. To develop an awareness of one way jobs are advertised.

Materials Needed

Business Careers for Men and Women Worksheet
Business and Office Occupational Definitions Worksheet
Directing Office Jobs Worksheet
Business and Office Help Wanted Worksheet
Pencils

Group 1

Hand out the worksheet, "Business Careers for Men and Women." Discuss the occupations in the list in terms of their definitions so that the children understand what each occupation involves.

Ask the children to write in the rectangles the occupations that men and women would do. Upon their completion of this activity, ask the students if it is all right for both sexes to work in any given occupation. Have children mark out the words women and men in the center circles and print in the word "people." Place the worksheets in the notebooks.

Group 2

Have the children fill in the blanks with the appropriate occupation from the list at the bottom of the worksheet, "Business and Office Occupational Definitions."

Children may need assistance in the definition of some terms. Help them as teacher deems necessary.

When going over the worksheet upon completion, bring to the attention of the students the sex the name in each example indicates. Is it all right for Sally to be a mathematician or John to be a receptionist, etc.?

Worksheets are to be mounted in their notebooks.

Group 3

Hand out the "Directing Office Jobs Worksheet." Read the directions aloud to the children. Define the occupation of office manager. Can all children in the group be an office manager if they wanted to? Why or why not?

Have the children complete the worksheet as directed. Circulate among the children, assisting them as needed. Have them mount worksheet in notebook when completed.

Group 4

Hand out the "Business and Office Help Wanted Worksheet." Read the directions to the class. Read each help wanted ad with them to aid their understanding of the abbreviations typical in such ads and answer their questions as they arise. Circulate among the students and work with their reasons for their own particular choice, if necessary, to promote interest and ability as major concerns in choosing a job.

Students should mount this worksheet in their notebooks.

REVIEW

Behavioral and Instructional Objectives

1. To emphasize that sex and race do not dictate the activities a person can do.
2. To work cooperatively with others in breaking down sex role stereotypes.
3. To identify the interdependence between and within occupational clusters.
4. To encourage exploration of potential occupational options.
   a. To project a future occupational role in each cluster for themselves
   b. To choose an occupation on the basis of interest and ability instead of sex or race
5. To understand that work in the home and work outside the home are related.

Materials Needed

Girls Can! Boys Can! Worksheet
Moving Connections Worksheet
My Jobs and Future Occupations for Me Worksheet
Community Career Flannel Board Figures
Our Helpers Play People and Labels

Group 1

Hand out the "Girls Can! Boys Can!" worksheet and instruct the children to unscramble the letters on the top part of the worksheet to find the activities for boys and girls.

Ask the students to work with a friend to make a list of four activities girls enjoy and four that boys enjoy, according to the instructions on the second part of the worksheet. Discuss with the entire group why the activities named can be enjoyed by both girls and boys and that future occupations related to these activities can be held by both women and men. Place the worksheet in the notebook.

Group 2

Ask the students to complete the "Moving Connections" worksheet. Discuss as a group why the people in each group must work together.

Identify the occupational cluster in which each person listed might belong. Example: Person A, the ticket seller, not only belongs in transportation, but could be in public service or business and office. Person D, the passenger, could be in business and office, a homemaker, etc.

Have the children place the completed worksheet in their notebooks.

Group 3

Hand out the "My Jobs" worksheet. Instruct the children to use the cluster concept to develop a cluster of jobs they do at home and at school. They should draw lines from the center (My Jobs) and make rectangles or circles in which they will write (print) their home and school jobs. Examples include clean own room, take out trash, school work, class pencil sharpener, feed pets and do dishes. Circulate among students, assisting them as necessary.

Hand out the "Future Occupations for Me" worksheet. Instruct the students to fill in the surrounding circles with an occupation (or two) from each of the occupational clusters discussed in the past few weeks. Let the children try to recall the different occupational clusters on their own. Assist as individual need dictates, making sure each child has at least one occupation from each of the occupational clusters, including that of homemaker.

Have them put the finished worksheets in their notebooks.

Group 4

Have the Community Career Flannel Board Figures and Our Helpers Play People matched with labels of possible occupations such as homemaker, doctor, carpenter, train engineer, mail carrier and veterinarian. Additional labels may be printed on construction paper.

Choose a child to stand in the middle of the work area holding one of the occupational figures and its title in his/her hands.

Questioning Strategy

1. What occupation is (child's name) holding up? What occupational cluster does this occupation belong to?

2. What other workers/occupations does the (center worker) depend on? As the children name these occupations, have them take an appropriate figure and label and form a circle around the first child. (The children will be forming a living cluster illustrating the interdependency of the various occupational clusters.) Encourage information about each job/occupation from the child proposing it. Point out nontraditional occupational choices as they are mentioned. Try to bring out the interdependencies of the various occupations.

WORKSHEETS UTILIZED IN THE

EXPANDING OCCUPATIONAL AWARENESS OF SECOND GRADE CHILDREN MODULES*

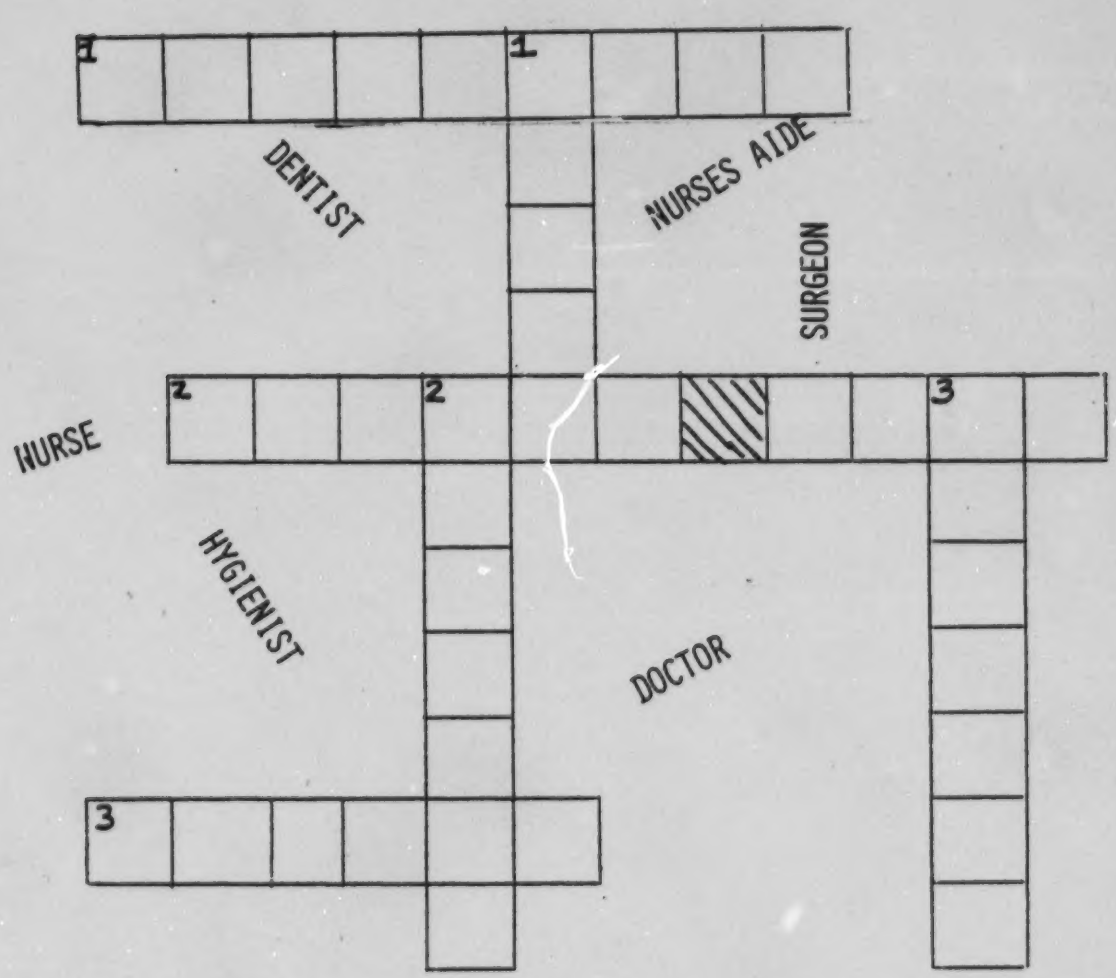
These will constitute the bulk of the occupational notebooks the children will develop.

*Some of these worksheets were adapted from At Least a Thousand Things to Do, D. Farnette, I. Forte and B. Loss. Nashville: Incentive Publications, 1977, with permission for classroom use granted by the publisher.

HEALTH CROSSWORD

ACROSS:

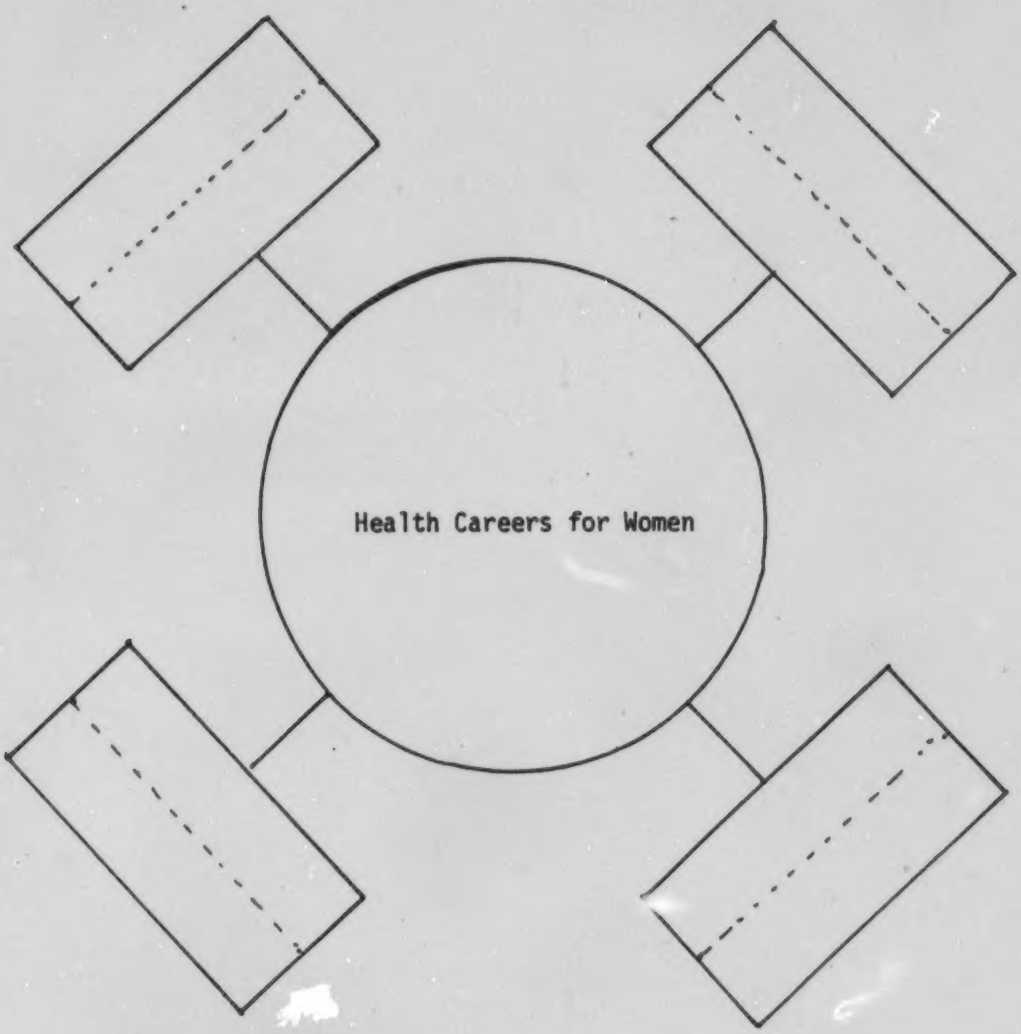
1. THIS PERSON HELPS A DENTIST AND CLEANS YOUR TEETH
2. THIS PERSON HELPS A NURSE
3. THIS PERSON HELPS SICK PEOPLE.



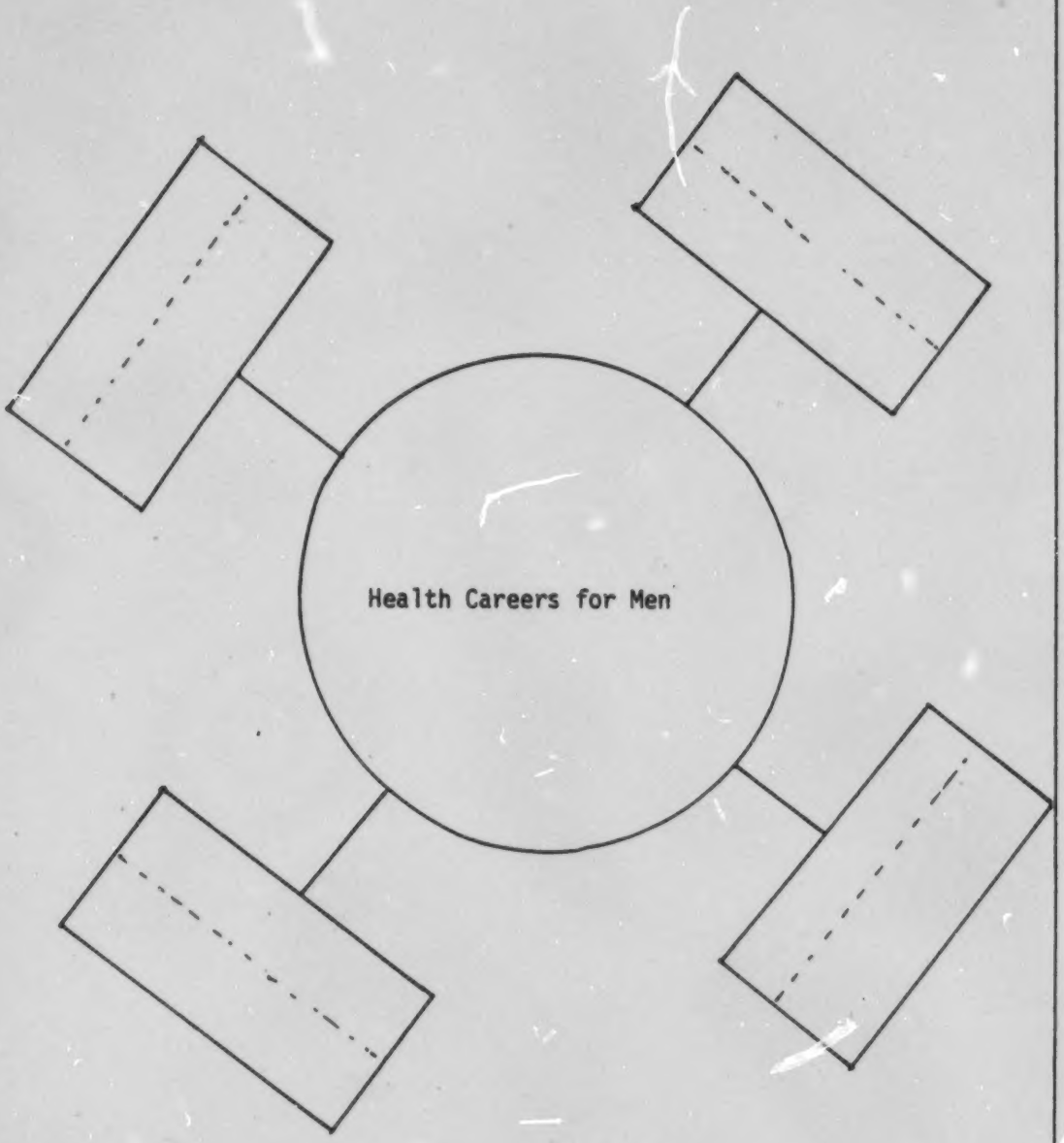
DOWN:

1. THIS PERSON HELPS A DOCTOR
2. SHE OR HE IS A DOCTOR WHO OPERATES ON PEOPLE
3. SHE OR HE PULLS BAD TEETH AND FILLS CAVITIES

HEALTH CAREER CLUSTER ACTIVITY



HEALTH CAREER CLUSTER ACTIVITY (2)



List

Dental Hygienist

Dentist

Nurses Aide

Optician

Pediatrician

Pharmacist

Doctor

Veterinarian

Nurse

Medical Secretary

HEALTH EQUIPMENT WORKSHEET 1

DIRECTIONS: LIST THE TOOLS USED BY EACH PERSON. A TOOL MAY BE USED BY MORE THAN ONE PERSON.

PEOPLE		TOOLS
NURSE	DOCTOR	SYRINGE
		SCALPEL
		THERMOMETER
		PRESSURE CUFF
		STETHOSCOPE
		OTOSCOPE
		SUTURES

HEALTH EQUIPMENT WORKSHEET 2

DIRECTIONS: LIST THE TOOLS USED BY EACH PERSON. A TOOL MAY BE USED BY MORE THAN ONE PERSON.

PEOPLE		TOOLS
DENTIST	HYGIENIST	X-RAY
		FLUORIDE
		DENTAL FLOSS
		TOOTH POLISH
		MIRROR
		DRILL
		PICK

KEEPING WELL

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14	15	16	17	18	19	20	21	22	23	24	25	26

1. THE PERSON WHO DELIVERS BABIES IS AN

14	2	19	20	5	20	18	9	3	9	1	14

2. THE PERSON WHO TAKES CARE OF YOUR EYES IS AN

15	16	20	9	3	9	1	14

3. THE PERSON WHO SELLS MEDICINE IS A

16	8	1	18	13	1	3	9	19	20

4. DOCTORS WHO TREAT ANIMALS ARE

22	5	20	5	18	9	14	1	18	9	1	14	19

5. PEOPLE WITH HEARING PROBLEMS GO TO THE

1	21	4	9	15	12	15	7	9	19	20

KEEPING WELL--PAGE 2

6. THE PERSON WHO RUNS A HOSPITAL IS CALLED THE

8	15	19	16	9	20	1	12

1	4	13	9	14	9	19	20	18	1	20	15	18

7. THE PERSON WHO HELPS THE DOCTOR IS A

14	21	18	19	5

8. THE PERSON WHO HELPS THE

14	21	18	19	5

IS CALLED AN

15	18	4	5	18	12	25

OR

1	9	4	5

9. A

19	9	3	11		16	5	18	19	15	14	

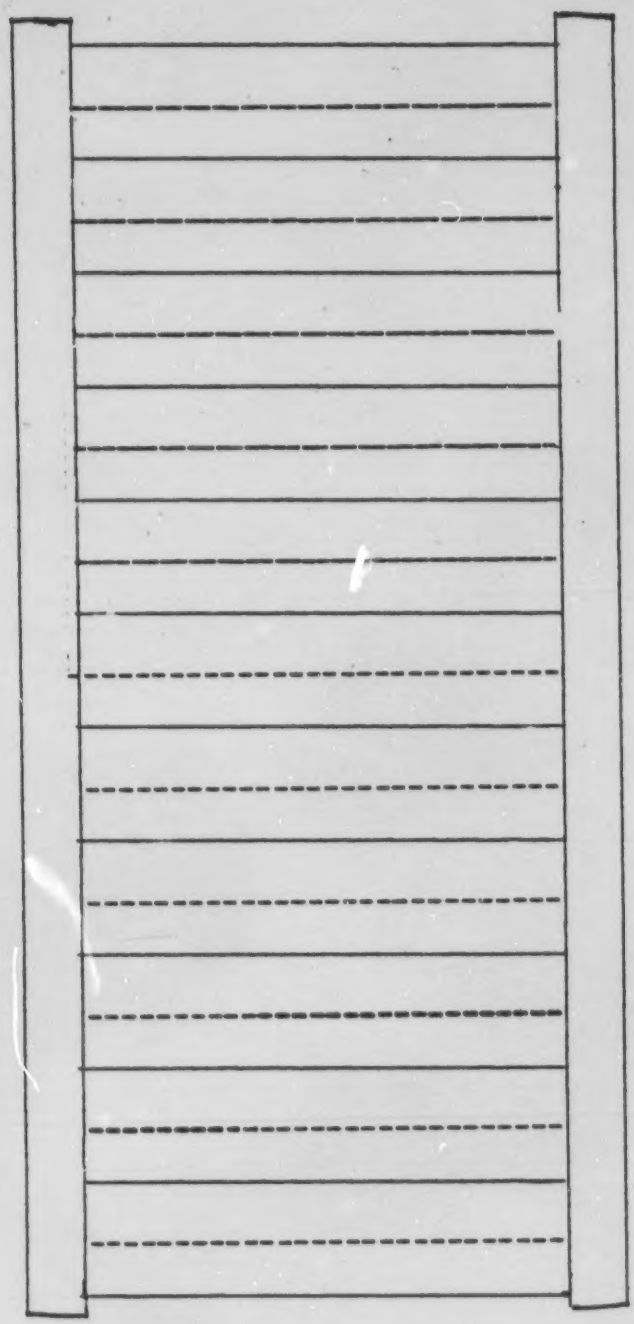
IS CALLED

A

16	1	20	9	5	14	20

LADDER OF SCHOOL PERSONNEL

Public Service



Teacher's Aide

Secretary

Principal

Teacher

Custodian

Librarian

Directions: Place the careers listed into order of responsibility.

PUBLIC SERVICE WORLD OF WORDS

A. If I want my hair cut I go to see a _____.

B. If I want to mail a package I go to the _____.

C. If I delivered newspapers I would be a _____.

D. If my kitty needs care I would see a _____.

E. If my house lights didn't work I'd call the _____.

F. If I smelled smoke I'd call the _____.

G. If I needed information on camping I'd call the _____.

H. If I moved to a new town and wanted to know more about public education, I'd call _____.

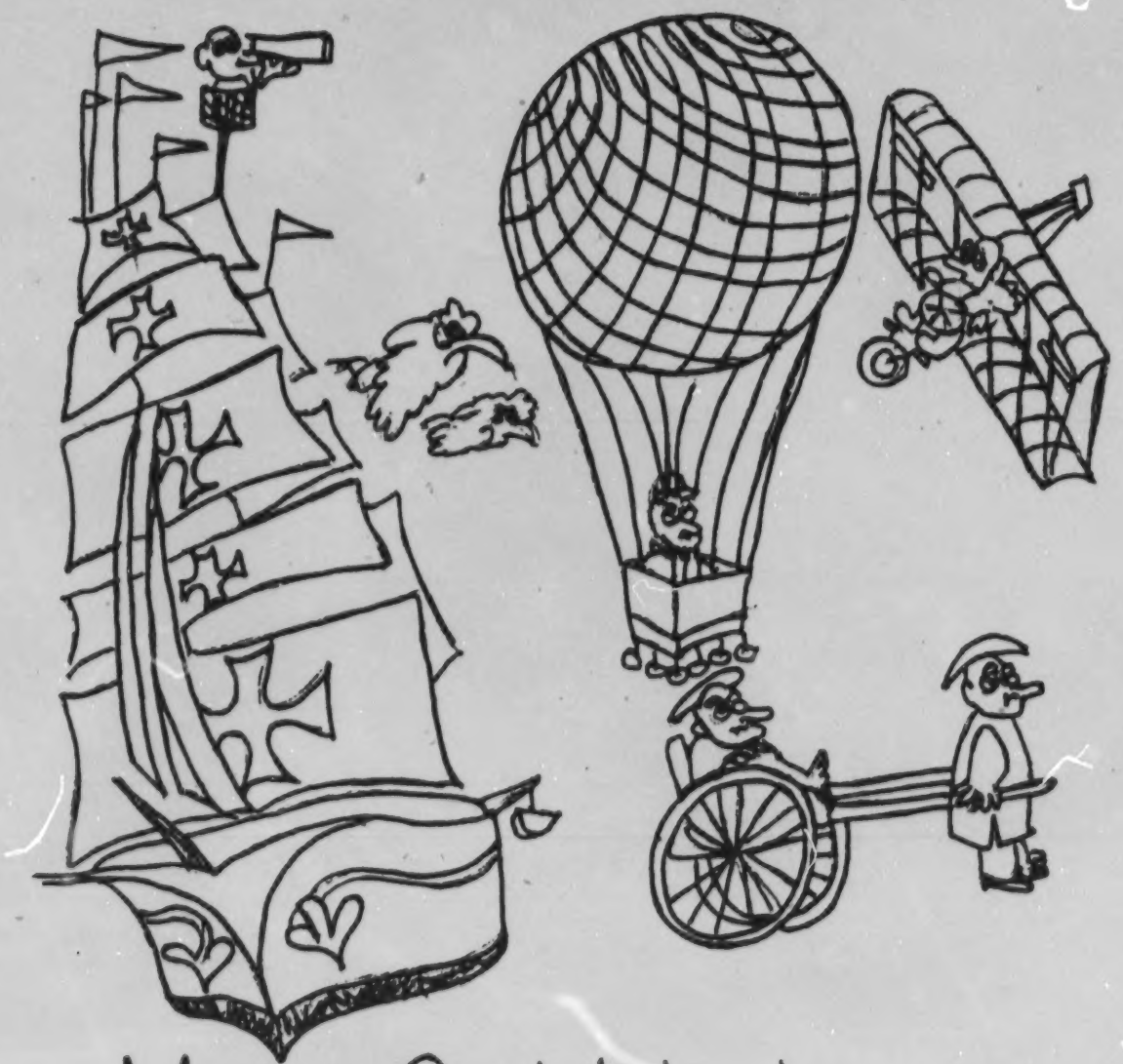
I. If someone robbed me I'd call a _____.

J. If I worked on telephone poles I could be a _____.

K. If I wanted to work with children I could be a _____.

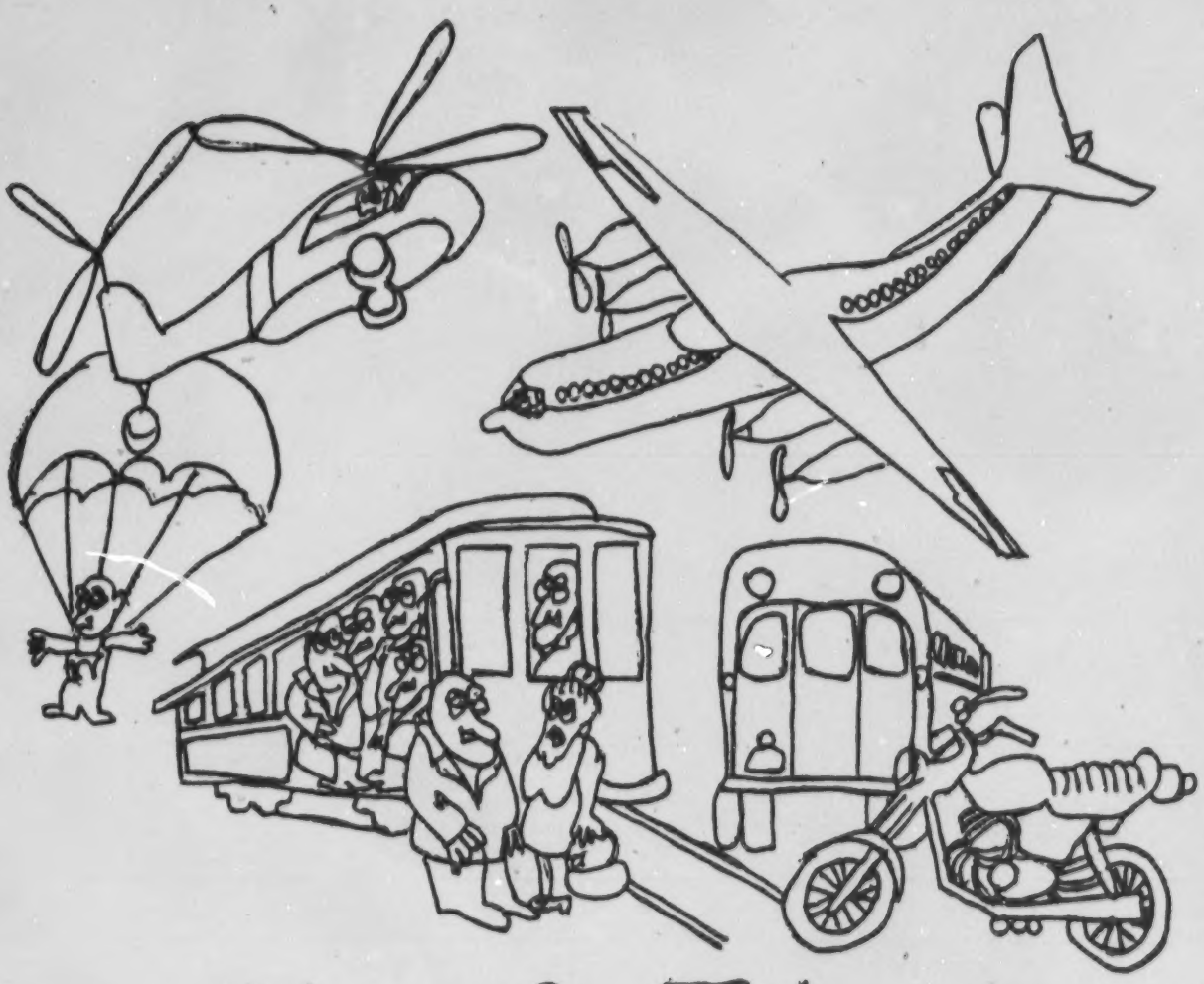
LIST OF OCCUPATIONS AND SERVICES

Teacher
Barber
Beautician
Linesperson
Post Office
Police Officer
Newspaper carrier
School
Veterinarian
Forest Service
Power Company
Fire Department



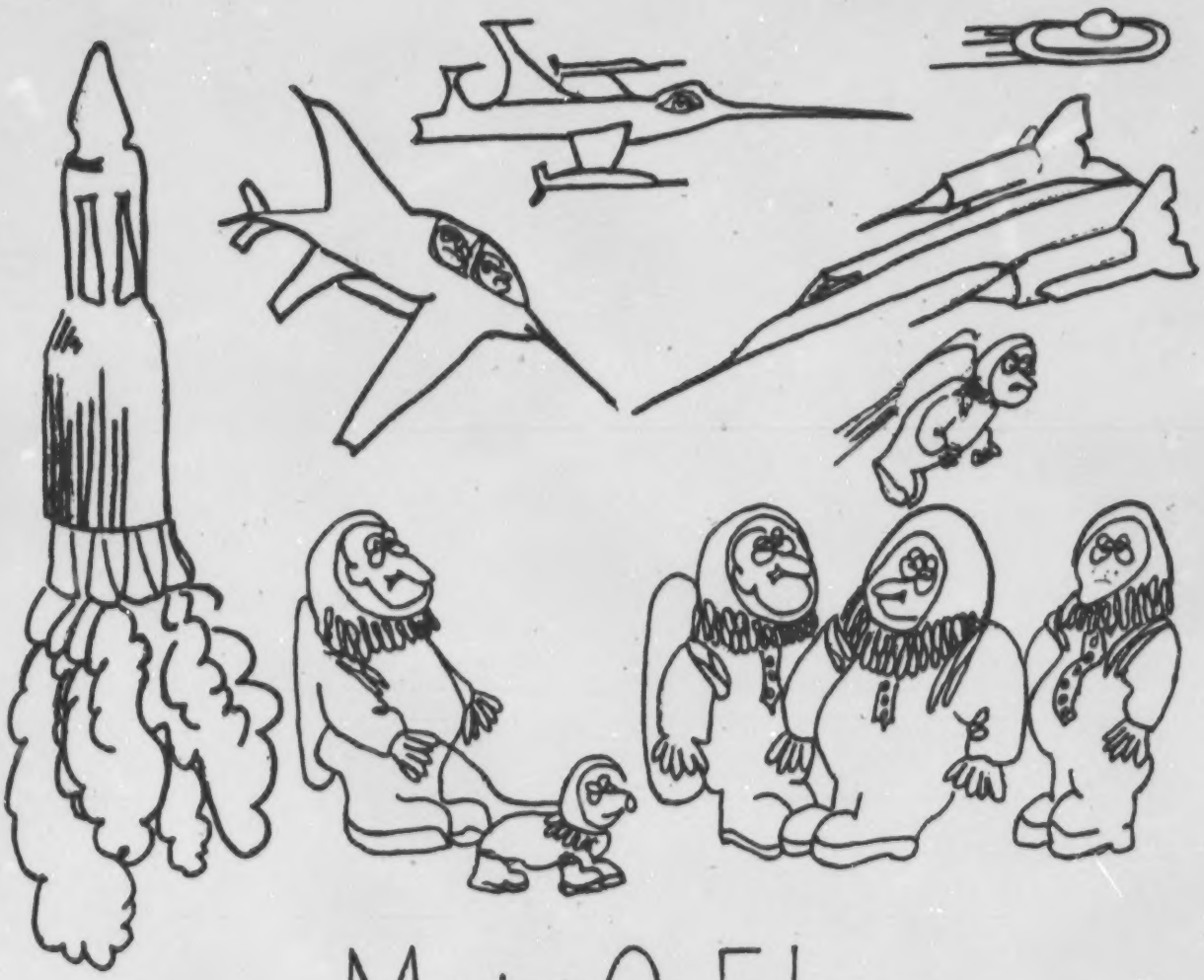
Moving On Yesterday

List the jobs in transportation in the past.



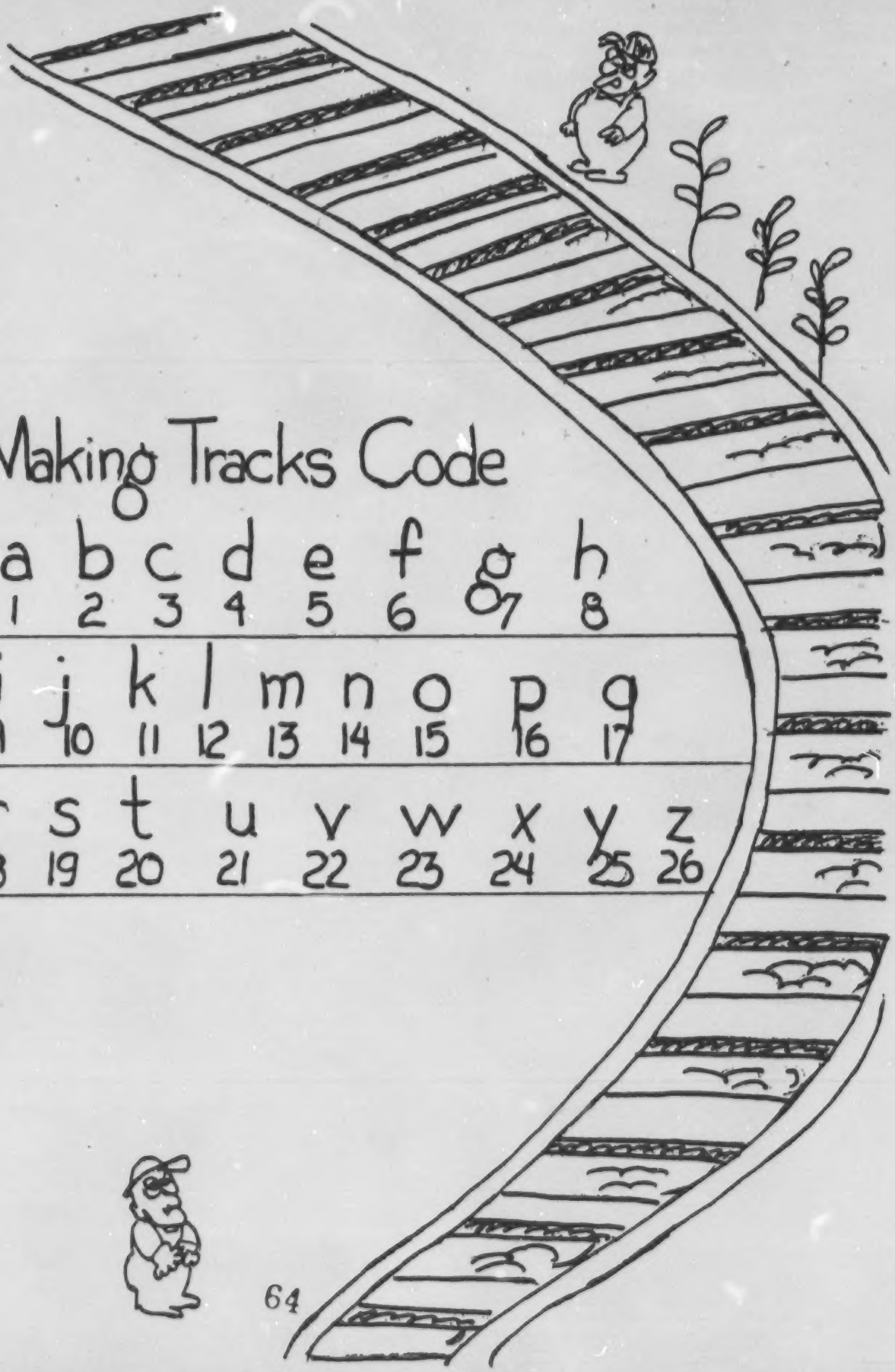
Moving On Today

List the jobs in transportation you see.



Moving On Future

List jobs in transportation in the future.



Making Tracks Code

a	b	c	d	e	f	g	h
1	2	3	4	5	6	7	8

i	j	k	l	m	n	o	p	q
9	10	11	12	13	14	15	16	17

r	s	t	u	v	w	x	y	z
18	19	20	21	22	23	24	25	26

MAKING TRACKS

1. THE PERSON IN CHARGE OF ALL TRAINS IN THE STATION IS CALLED THE

4	9	19	16	1	20	3	8	5	19

2. THE PERSON WHO COLLECTS TICKETS ON THE TRAIN IS THE

3	15	14	4	21	3	20	15	18

3. A PERSON WHO SERVES

13	5	1	12	19

AND GIVES PILLOWS TO PASSENGERS IS THE

16	15	18	20	5	18

4. THE

5	14	7	9	14	5	5	18

DRIVES THE TRAIN.

5. THE

20	18	1	3	11	3	18	5	23	

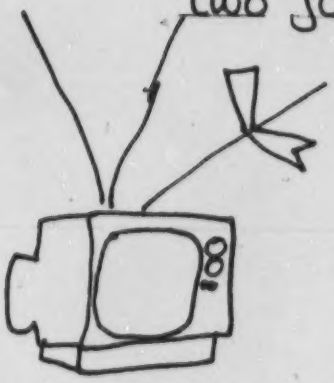
3	8	9	5	6

IS IN CHARGE OF

18	5	16	1	9	18	9	14	7

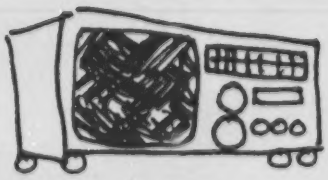
TRACK.

Job List: Name at least two jobs in each communication area.



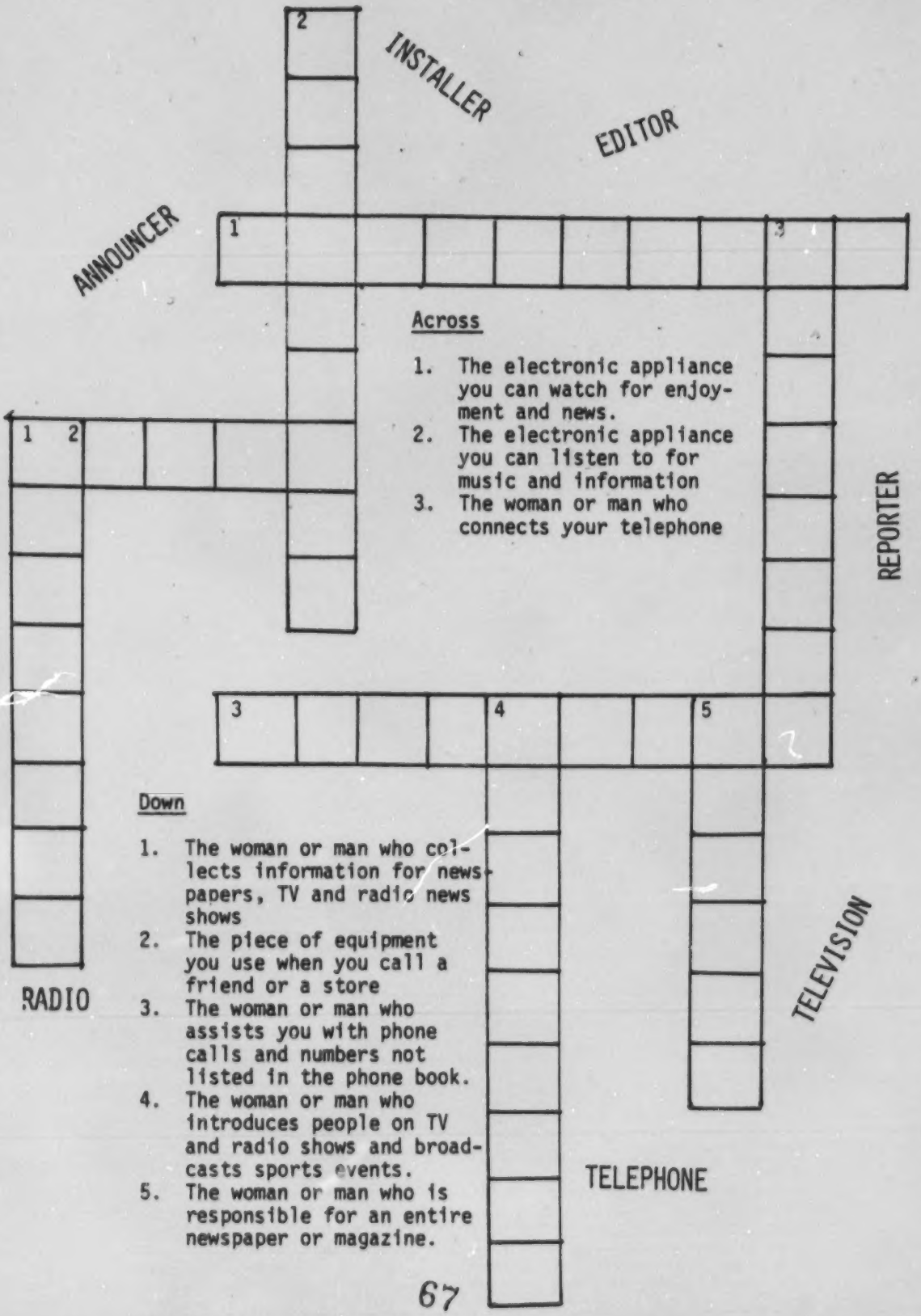
television

newspaper



radio

COMMUNICATIONS AND MEDIA PUZZLE



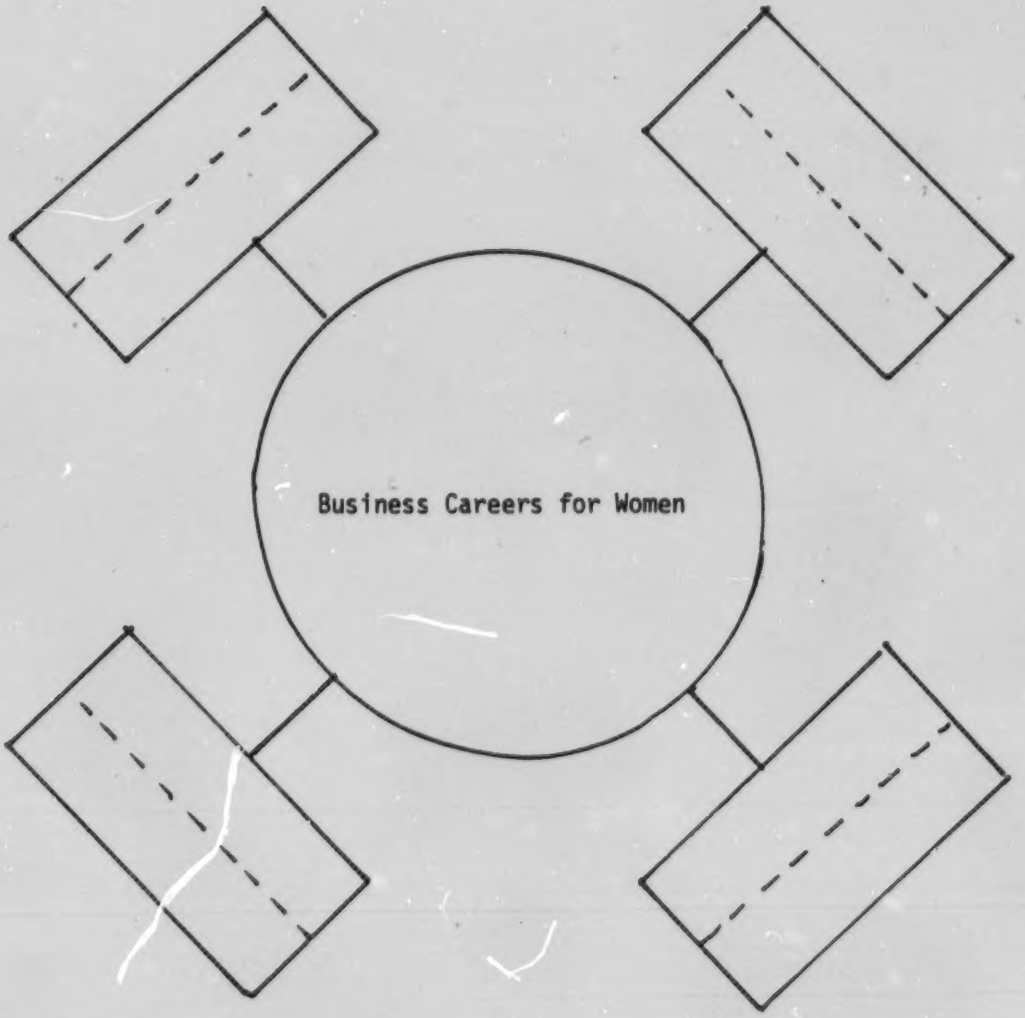
Across

1. The electronic appliance you can watch for enjoyment and news.
2. The electronic appliance you can listen to for music and information
3. The woman or man who connects your telephone

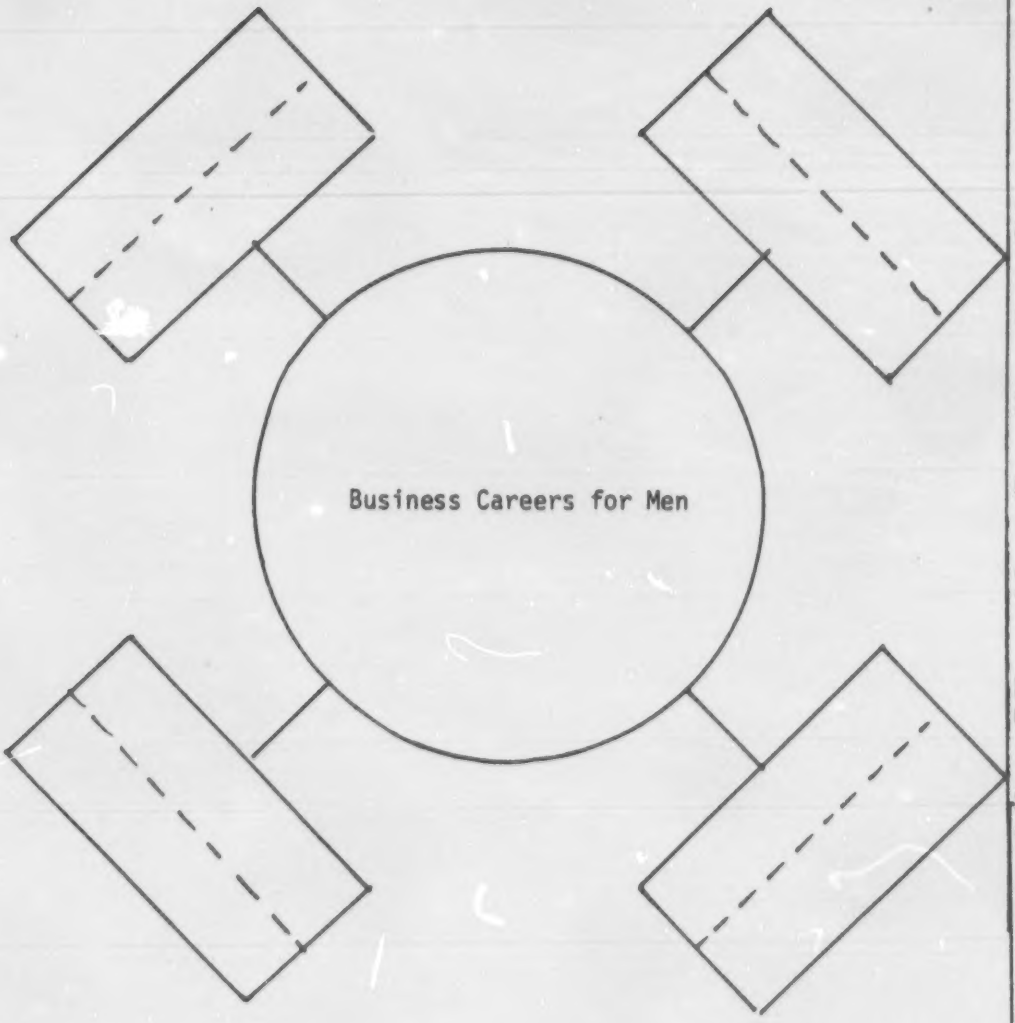
Down

1. The woman or man who collects information for newspapers, TV and radio news shows
2. The piece of equipment you use when you call a friend or a store
3. The woman or man who assists you with phone calls and numbers not listed in the phone book.
4. The woman or man who introduces people on TV and radio shows and broadcasts sports events.
5. The woman or man who is responsible for an entire newspaper or magazine.

BUSINESS CAREERS FOR MEN AND WOMEN WORKSHEET



BUSINESS CAREERS FOR MEN AND WOMEN WORKSHEET (2)



List

Accountant

Bookkeeper

Cashier

Computer Operator

Receptionist

Secretary

Mathematician

Clerk Typist

Loan Officer

Steno-grapher

BUSINESS AND OFFICE OCCUPATIONAL DEFINITIONS

1. If Sally wanted to solve problems that involve numbers she could be a _____ .
2. If John wanted to work in an office greeting people, answering the telephone and making appointments for customers he could be a _____ .
3. If David wanted to work in a bank and assist people who want to borrow money from the bank he could be a _____ .
4. If Cindy likes computers what type of an occupations could she consider for herself?_____ .
5. If Tom likes working in an office typing, taking notes and running office machines he could be a _____ .
6. If Jane wanted to work for a large company keeping records of their money and taxes she could be an _____ .
7. If George likes working in a store receiving money from customers for products they buy he could be a_____ .

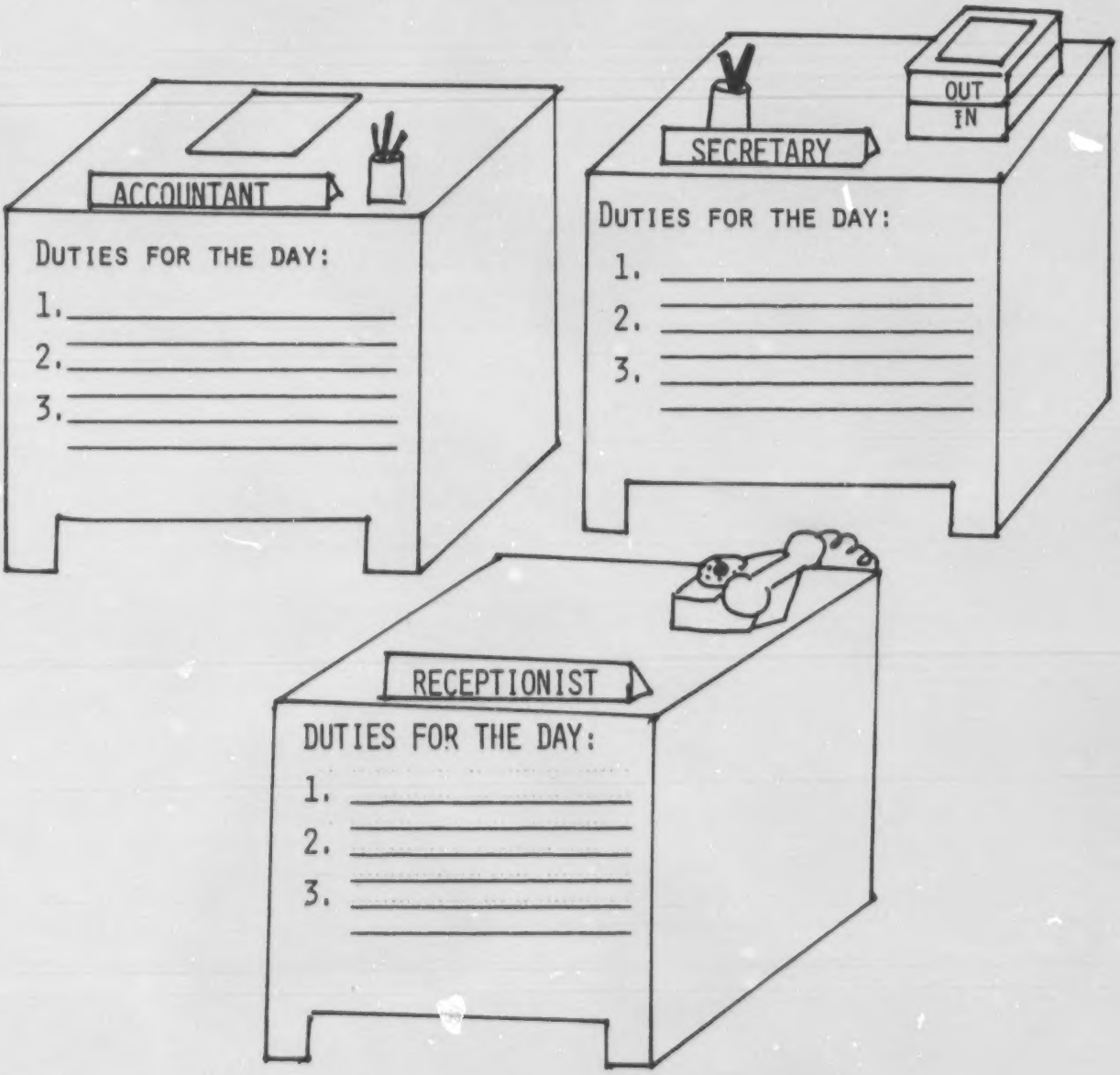
Job Listings

Cashier	Accountant
Mathematician	Computer Programmer
Loan Officer	Receptionist
Secretary	

DIRECTING OFFICE JOBS

You are the office manager and must assign this list of duties to the right office workers. Write the tasks in the spaces provided on each office desk.

balance financial records
take dictation
prepare tax forms
make appointments
type letters
file letters
greet and direct customers
write pay checks
answer telephone



BUSINESS AND OFFICE HELP WANTED

Use the help wanted ads to aid you in finding the best job available for you. Give reasons for your choice (use complete sentences).

Help Wanted Ads

Bookkeeper: Full or part-time, Exp. in accounts payable and receivable. Need good typing skills. Apply: In the Red. Co., 531 Park Drive.

CPA or Accountant: To manage Branch Office. Heavy tax background desired. Send resume to Box 555, IOU, Home Town, 12345.

Exec. Sec.: 2 years of expr., shorthand, typing, dictaphone. Pleasant office atmosphere. Call 622-9876 for appt.

Bank Cashier: We are seeking a highly motivated self-starter to direct the operation functions of a new independent bank. Exc. opportunities to join sr. mgt. Apply to M. VIP, Independent Bank, 25 Money St.

Manager's Ass't: For Ladies' dress store. Must be experienced in sales and management. Excellent opportunity for aggressive person. Call M. Dresser at 555-4949.

Computer Operator: Immediate openings with major firm. Exc. fringe benefits. Min. 1 yr. exp. with disk operating system. Send resume to Box 123, Digital, New York 15972.

Medical Stenographer: 60 wpm, medical technology. Call 587-4321 for appt.

Administrative Position: Expanding local office needs manager. Great opportunity for ambitious person. Will train. Call 295-3497.

Best job for me to apply for: _____

Reasons for your choice: _____

_____

_____

_____

_____

Girls Can!

albl

play

ekasns

collect

mmrhea and wsa

tnpia a efnec

Boys Can!

koco

itsbyba

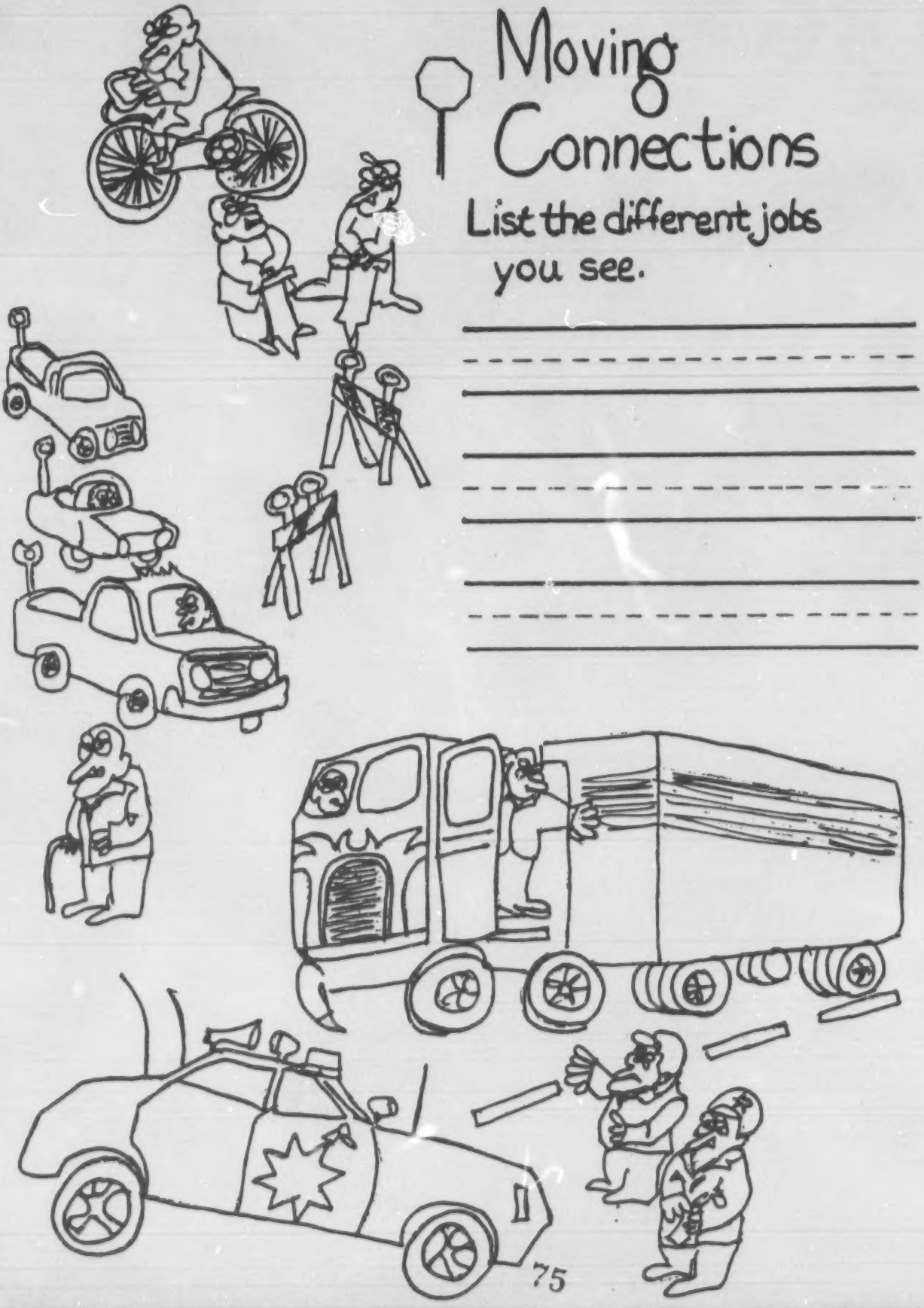
loferws

grow

esw

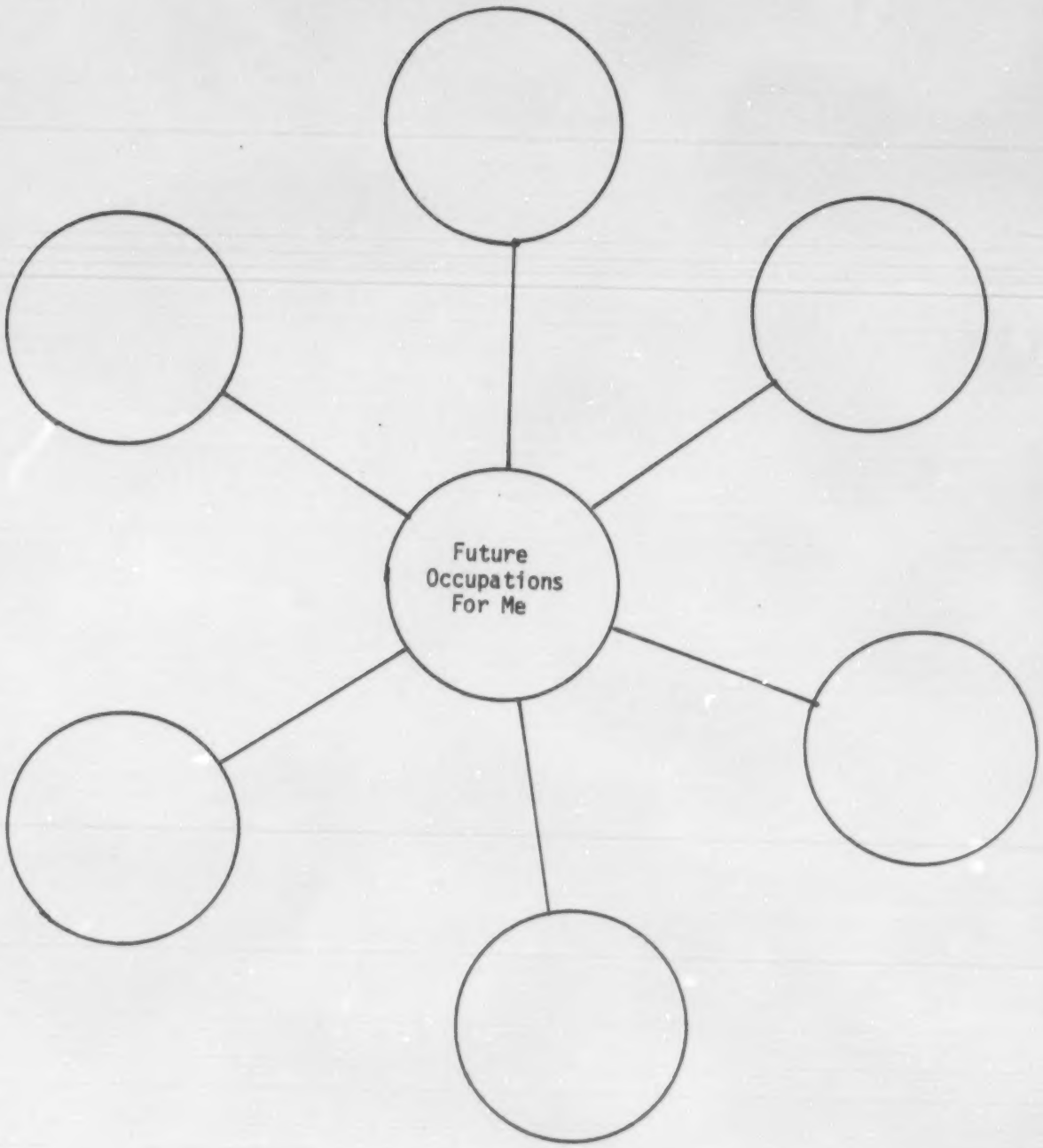
Moving Connections

List the different jobs you see.



MY JOBS

FUTURE OCCUPATIONS FOR ME



MY JOBS

MY JOBS AT HOME	MY JOBS AT SCHOOL

SECOND GRADE MODULE REVISIONS

By

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and

Melinda Toney, B.A.
Graduate Research Assistant, Family and Human Development

MODULE INTRODUCTION

The module called for a nine-week schedule utilizing 30-minute activities four days per week. The four days per week in 30-minute sessions was retained, however, the 30 minutes should be an approximation. As visiting teachers, constrained by a specific schedule, we had no flexibility to adjust to the variable difficulty of the daily lessons. Experienced teachers in their own classroom would not have the constraints imposed by a specific schedule. For planning purposes, the 30-minute period is sufficient unless the classroom teacher wishes to expand or condense activities. For instance, the Monday of the third week was a holiday. The activities for that day easily were condensed in the remainder of that week so that each group received all four activities.

As suggested in the module, the experimental class was divided into four groups. For this experiment we were fortunate to have a double class--two teachers, two proximal rooms and 48 students. One room was for desk activities, the other for rug and long table activities. With the inclusions of the project's two visiting teachers we had four groups of 12 each. The groups were kept constant. Thus, one half of the class received all units

from either regular classroom teacher, while the remaining half of the class received all units from the team of visiting teachers.

The groups moved from location to location in the two classrooms as necessary. The visiting teacher team had one male and one female; regular classroom teachers both were female. Intentionally the students supervised by the male visiting teacher were switched to the female visiting teacher the following week, alternating weekly, in order to minimize the male-female teacher effects among the visiting teachers' two groups. The other half of the students, under the regular classroom teachers, had female teachers only, although the male visiting teacher was frequently nearby and visible.

As a casual observation, the boys in the groups who did not have activities with the visiting teachers appeared frequently to make gestures or voice greetings to the male visiting teacher but less frequently to the female visiting teacher although both teachers were present. Girls in those groups were more reticent; only those who had "best friends" in the visiting teacher groups made an effort to interact with either visitor, apparently equally with the male and with the female.

The lesson descriptions herein follow the schedule for the first teacher throughout the week, according to the attached schedule of activities. In each week the order of activities is not important; the topic is the same throughout the week but the daily activities are independent of the others in that week.

WEEK ONE

Unit One: Introduction

Day 1: After an introduction of the visiting teachers to the class by the regular classroom teachers, the class was divided into four equal

sized groups, one per teacher. The children pinned on name tags and the visiting teachers spent several minutes rehearing names. As an introduction to various occupations, the children played Concentration with the Robot Card decks. By dividing the groups into teams of two children each, four pairs to a deck, all 16 children could play using two decks. As a card was exposed, they had to announce the occupation depicted before trying to match the card. Winners were permitted to gather name tags and rearrange the desks. A few of the occupations had to be explained. Some of the children had difficulty sounding out unfamiliar words such as archaeologist and photographer.

Day 2: In the same groups, the teachers again practiced memorizing names of their respective groups. Using the Our Helpers Play People stand up figures, each student was required to announce which occupational figure they had, describe how the figure's clothing signifies the occupation, describe activities of a person in that occupation and give an opinion whether or not the occupation is one they would consider for themselves. Purposely, children were given opposite gender figures. Several remarked about wanting an appropriate gender figure, but the teachers did not permit exchanges, stressing the interchangeability of genders for the illustrated occupations.

The module suggestions of discussing the interdependence of occupations was not covered due to a lack of time. The children sometimes did impromptu role playing, using the gender of the stand-up figures.

Day 3: Because of the size of the group, individual play was not permitted. The teacher described the interdependence of occupations using flannel board figures in step-by-step construction of an apartment building, mixing genders for various occupations involved from architect through construction, to the building superintendent. The children responded well

and could match occupations with tools for construction occupations.

Day 4: Career Lotto was used in competition between three-people teams in Concentration. Once a match was made the team had to read the occupation and list an item of necessary equipment or a requisite skill for the occupation. If the team could not list a tool or skill the match was passed to the next team in rotation until a skill or tool was named. The Coast Guard Petty Officer and Recreation Director were unfamiliar to the class. The other occupations were familiar to, or identifiable by, at least one child.

WEEK TWO

Unit Two: Construction

Day 1: The teachers switched groups, visiting teachers exchanging with each other, regular teachers exchanging with each other. The children again had pin-on name tags for the visiting teachers. The children insisted on continuity between the figures used in Day 3 of Unit One and the figures used for this flannel board ription of construction occupations and materials. Few children thought women could be cement masons, carpenters and bricklayers, especially those children whose fathers were construction workers.

Day 2: Children were told to build any building they wanted to make, using styrofoam packing chips, wooden scraps, toilet paper roll tubes, kitchen wrap tubes and glue. Completed projects were displayed in the classroom. The children were too involved in building to participate in the questioning strategy.

Day 3: Drawing buildings was a very popular activity. Children had access to an assortment of felt-tip markers and were instructed to have no portion of the drawing paper uncolored.

Day 4: The children really liked the Erector Set. At first, girls seemed reticent to try to build anything, while the boys were eager and familiar with the building parts. However, once shown how to assemble the pieces, the girls became involved in the building project. Two girls withdrew after being rebuffed by boys. The two girls seemed content to assemble Tinker-Toy pieces, apart from the Erector Set group. The buildings were unique structures rather than recognizable models, hence only a portion of the questioning strategy was applicable.

WEEK THREE

Unit Three: Health Occupations

Day 1: The "Keeping Well" worksheet was used (see attached). The use of worksheets was explained and each child was given a colored folder to decorate (colors matching within a given group). Codes were very popular for most of the children but vexatious for a few. The questioning strategy worked well.

Day 2: The "Health Crossword Puzzle" was used. Once crossword puzzles were explained, most children could complete the puzzle. The questioning strategy worked well.

Day 3: The "Health Career Clusters" worksheet was used and discussion was excellent.

Day 4: The "Health Equipment" worksheet was utilized. Many of the children were at a loss regarding dental equipment since they had not been to dentists yet.

WEEK FOUR

Unit Four: Transportation

Day 1: Many children found drawing themselves in a transportation career difficult. Eventually all could describe a job, at least by drawing the necessary equipment. There was too much preliminary explanation and not enough closing discussion.

Day 2: The "Moving On" worksheets were used and discussion was lively.

Day 3: The collages were popular but virutally no nonstereotypic pictures were found in magazines.

Day 4: The "Making Tracks" worksheet was distributed. Most railroad jobs are foreign to these children. Discussion was difficult.

WEEK FIVE

Unit Five: Communication

Day 1: The "Communications and Media Cluster" was used; this lesson was difficult because most children have no idea of behind-the-scenes activities. They are familiar with actors, radio announces and the newspaper carrier, but not familiar with other jobs. This lesson should be expanded greatly.

Day 2: The telephone company teletrainers were popular and easy to use. One group used "reporting a fire" as the exercise.

Day 3: The discussion of alternative communications was lively and broad ranging. The time factors seemed difficult for some of the children to grasp.

Day 4: "Communications and Media" puzzle was less of a problem than the earlier crossword puzzle. The process of completing crossword puzzles

is very lengthy and for many in the class, extra time was necessary. Those who finished early tried making their own crossword puzzles.

Day 5: Normally the units only last four days. However, on Friday of the communications unit the class took a field trip (four blocks) to the Post Office for a tour of the facilities. Each child mailed a self-addressed, stamped envelope (the teacher-administered class went on a field trip to the nearby University Chemistry Department).

WEEK SIX

Unit Six: Office Careers

Day 1: The "Office Skills" worksheet worked well, especially after describing office activities using the flannel board figures. Secretary and typists were stereotyped noticeably by the children. Charades also worked well, using only the jobs and skills on the Office Skills worksheet. The revised worksheet is attached.

Day 2: Common classroom and personal items were tagged with prices. Chilren were directed to use a calculator to tabulate their total of five items, then choose which item should be eliminated to bring their total to under the nearest dollar. The shopping and tabulating went well but the last instruction was confusing to many. The Shopping List worksheet is attached.

Day 3: The class thoroughly enjoyed using typewriters. The repeating capability of the Selectric typewriter was discovered and generally abused. The letters home were interesting, especially since the previous Friday's letters mailed at the Post Office all were delivered. The Typing Guide is attached.

Day 4: Shorthand and nib pens were a very popular activity. We made a point of having the male visiting teacher teach shorthand to all groups

since shorthand was seen as a female activity in earlier discussion. Children made their own messages to each other. The shorthand guide is attached.

WEEK SEVEN

Unit Seven: Review

Day 1: The "Can Can" sheets were easy to do. Discussion brought out examples of most of the activities illustrated on the worksheets.

Day 2: The "Moving Connections" worksheet was not effective. Since many children could not pick out very many jobs, we used Robot Cards as a basis for reviewing that the skill needs of various jobs are not gender-related. Television characters were used as examples. The discussion was nonstereotyping.

Day 3: The discussion of the "My Jobs" worksheet pointed out that most children had identical jobs are home and at school, regardless of gender.

Day 4: The concept of clusters still did not come through well. The class could identify jobs, list some skills and discuss the gender-free nature of the job but clusters confused the issue.

FINAL MODULE NOTE

The Consumer and Homemaker cluster was dropped to facilitate conforming to the schools' schedules. However, as indicated by the teacher interviews, a homemaker unit is desired. The activities for this unit seem appropriate based on the activities of the other units.

For the same reason, scheduling, the Public Servide cluster was omitted from the classroom experiment. The teacher in the other second grade class-

rooms with modules in use reported mixed reactions to the lessons. The Public Service World of Words worksheet required explanations of beautician, forest service, and power company. The "Ladder of School Personnel" is problematic in that a hierarchy of school responsibilities is difficult to support. A child's perception may differ markedly from the perceptions of adults. The ladder makes no allowance for equal responsibilities. The existance of public service jobs is a more important concept than a responsibility hierarchy. if a public service cluster is used, the focus should be on skills and gender equality.

The Business and Office unit was revised to match the interests of the class and their level of familiarity about office jobs. Most of the jobs on the Business Careers worksheets were unfamiliar to the class. Reading level of the Help Wanted worksheet was above the class skill level. The revisions involved more hands-on type activities than the original worksheets.

REVISED WORKSHEETS

OFFICE SKILLS

1. I GREET PEOPLE AND ANSWER THE TELEPHONE.

   I AM A _____.

2. I RUN A STORE OR AN OFFICE.

   I AM A _____.

3. I TYPE ALL LETTERS FOR THE OFFICE.

   I AM A _____.

4. I FILE ALL LETTERS. I AM A

   _____.

5. I TYPE, FILE AND ANSWER THE TELEPHONE.

   I AM A _____.

MANAGER
CLERK
SECRETARY
RECEPTIONIST
TYPIST

MY SHOPPING LIST

ITEM	PRICE	TOTAL COST

SAMPLE OF LETTER TO BE TYPED

MARCH , 1979

DEAR

TODAY IN CLASS WE LEARNED HOW TO USE A TYPEWRITER.

I DID A LETTER MYSELF. I LIKE TO TYPE, IT IS FUN.

LOVE,

Shorthand

a
b
c
d
e
f
g
h
i
j
k
l
m
n

o
p
q
r
s
t
u
v
w

Brief Forms

the
is
a, an
and
in
I
can
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have
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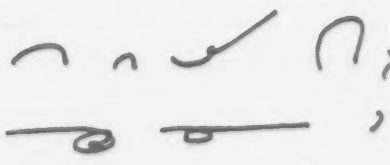

Second Grade--Nine Weeks--Thirty Minutes--Four Groups (Maximum 5 per group)

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
Unit 1 Introduction	1. Robot	Our Helpers	Flannel Board	Lotto
	2. Our Helpers	Flannel Board	Lotto	Robot
	3. Flannel Board	Lotto	Robot	Our Helpers
	4. Career Lotto	Robot	Our Helpers	Flannel Board
Unit 2 Construction	1. Flannel Board	Styro	Drawing	Erector
	2. Styro Building	Drawing	Erector	Flannel Board
	3. Drawing	Erector	Flannel Board	Styro
	4. Erector	Flannel Board	Styro	Drawing
Unit 3 Health	1. Keeping Well	Puzzle	Cluster Sheet	Equip, Sheet.
	2. Puzzle	Cluster Sheet	Equip, Sheet	Keeping Well
	3. Cluster Sheet	Equip. Sheet	Keeping Well	Puzzle
	4. Equipment	Keeping Well	Puzzle	Cluster Sheet
Unit 4 Transportation	1. Draw	Moving On	Collage	Making Tracks
	2. Moving On	Collage	Making Tracks	Draw
	3. Collage	Making Tracks	Draw	Moving On
	4. Making Tracks	Draw	Moving On	Collage
Unit 5 Communication	1. Com./Media Clus.	Teletrainers	Problems	Puzzle
	2. Teletrainers	Problems	Puzzle	Clusters
	3. Problem Solving	Puzzle	Clusters	Teletrainers
	4. Puzzle	Clusters	Teletrainers	Problems
Unit 6 Office	1. Office Skills	Shopping List	Typing	Shorthand
	2. Shopping List	Typing	Shorthand	Office Skills
	3. Typing	Shorthand	Office Skills	Shopping List
	4. Shorthand	Office Skills	Shopping List	Typing
Unit 7 Review	1. Can Can	Connections	My Jobs	Questions
	2. Connections	My Jobs	Questions	Can Can
	3. My Jobs	Questions	Can Can	Connections
	4. Questions	Can Can	Connections	My Jobs

POST TESTING INTERVIEW WITH 2ND GRADE EXPERIMENTAL CLASS TEACHERS*

Q: Which materials were popular in your class?

A: Of the PACT toys the mix and match Lotto was rather popular for use in small groups in playing Concentration. The board puzzles were interesting and challenging for some but the sharper kids found them too easy. I would keep the board puzzles in the room but would not use them for the entire class. The jigsaw puzzles were popular among the girls but not so with many boys. The Robot Cards were popular, again in playing Concentration. Tinker Toys and the Erector set were very popular--I wish we had more sets available for free time.

Q: Which materials were unpopular?

A: The doctor kits were too cheap to be worthwhile. The Our Helpers Play People stand-up figures work very well in a structured situation but lose value without supervision. Some students had mock fights with the figures or collapsed into laughter after standing the figures on their heads. The Ungame was beyond the class.

Q: Will you use the modules again?

A: Yes, with situational modificatons.

Q: Are there any specific careers you would add or delete?

A: Since this area has manufacturing I would add that occupation. Homemakers were noticeably omitted; this I would change in my own modules.

Q: Any other changes you would make?

A: Nine weeks is too long. The careers and sex roles should be incorporated throughout other activities during the year. If not incorporated, I would use a careers block of no more than six weeks, probably early in the school year. The Community Careers Flannel Board Set was a great vehicle for introducing the interconnectedness of the careers; but once labeled a particular occupation the class was later uncomfortable when the same figure would be used for another occupation later. More flannel board figures would be helpful. The boys tried to monopolize the Erector set, as "expects," but once encouraged, the girls became involved and as adept as the boys. Our field trips (one class to the Post Office, the other class to the University Chemistry Department) were excellent, and brought life to academic treatment of life. I would use more parents next time, making occupations more visible.

*The two teachers who presented our modules in their classes and the teacher of the class in which the researchers presented the module.

Q: Are there any worksheets you would not use?

A: The changes made were good however a couple of work sheets still were problematic. The communications worksheet (television, radio, newspaper careers) was an unfamiliar topic for the class. The Moving On and Moving Connections worksheets should be introduced by a nonsexist filmstrip, for background information.

Q: Any other problems with worksheets?

A: As expected,back-up activities are needed for those who work quicker than the rest. Readability is a problem, but not if the vocabulary is introduced with visual aids before using the worksheets.

Q: Any other comments?

A: Parents should be involved in this subject presentation. Many students do not know what their parents' occupations are and what they actually do. Generally hands-on activities are better than lectures and worksheets. As I become more familiar with the topic these hands-on activities will emerge. I will use a careers unit again, it is an important subject

EXPANDING OCCUPATIONAL AWARENESS OF FOURTH GRADE CHILDREN

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1979

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EXPANDING OCCUPATIONAL AWARENESS OF FOURTH GRADE CHILDREN

This six-week modular unit has been designed in accordance with the U.S. Office of Education guidelines to encourage students to consider a vareity of occupational roles, regardless of sex or race; to encourage students to see adults of both sexes and themselves in multiple family, work and relationship roles; to develop awareness of some of the sex role stereotyping that exists in the media, literature, and occupational roles; to gain some understanding of how females and males are stereotyped into certain roles; and the effects of this stereotyping on occupational choice and personal fulfillment.

The activities have been designed to help the children develop an awareness of a number of facets of the work world, including the relationship between work at home, family living, and work outside the home. The concept of occupational clusters has been utilized to introduce a wide variety of occupations, the interrelationships between occupations in the same cluster as well as the interdependence between occupational clusters.

Many of the activities have been designed for the individual student to mount into a notebook of occupations which provides a concrete finished product with considerable information to be shared with one's family, as well as serving as a potential resource for future classroom work. Some of the activities have been adapted from At Least a Thousand Things To Do by C. Farnette, I. Forte, and B. Loss (Nashville: Incentive Publications, 1977) with the publisher's permission, upon purchase of one copy of the booklet for each classroom in which the modules will be utilized. Others have been designed around nonsexist, nonracist educational games developed by teachers to explain the concepts of various careers and the relationships of the various career clusters.

The module has been developed to provide five 45-minute sessions per week. The size of the class and the number of teachers/teachers aides present will dictate possible procedural changes, specifically, breaking the class down into two or more groups in order to facilitate more student involvement in the discussion aspects of the modules. If there is division into groups, each should have approximately the same number of girls and boys.

WEEK ONE: INTRODUCTION TO THE CAREER CLUSTER CONCEPT

Developmental and Instructional Objectives

1. To gain an understanding of the concept of career clusters.
2. To be able to identify and discuss a minimum of six occupations within at least three of the career clusters.
3. To understand the interdependence of occupations within a cluster and between the various clusters.
4. To be introduced to the concepts of services and products.

Materials Needed

Dictionary
Magazines
The Children's Dictionary Of Occupations
Job Cluster Worksheet
Manufacturing Match Worksheet
Hospital Hunt Worksheet
Super Sandwich
Endangered Species
Space Hop
Junior Executive
Robot Card Game
Erector Sheet

Week 1 Unit 1

Introducing the Concept of Career Clusters: Point out to the class that there are more than 26,000 different occupations in the United States. It would be impossible to learn about all 26,000. To make it easier, the United States Office of Education has grouped them into 15 different categories. These categories are called clusters. It is a way of grouping jobs according to particular factors. One way jobs may be grouped is according to work field, such as transportation, recreation and business. (Other ways are products produced, services performed, where performed--indoors or outdoors, etc.)

List the 15 career clusters on the board for the students:

Agriculture (Agri-Business)
Business and Office
Communications and Media
Construction
Fine Arts and Humanities
Home Economics (Consumer Education)
Health
Hospitality and Recreation
Manufacturing
Marine Science
Marketing and Distribution
Natural Resources and Environment
Personal Resources
Public Services
Transportation

Hand out the Job Cluster worksheet and ask the students to choose one of the career clusters. Write it in the center circle and then write an occupation that belongs in that career cluster in each of the six smaller circles.

The teacher might want to group the children together who have chosen the same career clusters so that they can generate more jobs to fill their circles. The children can use the dictionary and The Children's Dictionary of Occupations as well as magazines to give them ideas.

Collect the worksheets at the end of the session. Be sure each student has written his or her name on his/her paper.

Week 1 Unit 2

Before the beginning of the session the teacher should analyze the papers in order to carry on class discussion more knowledgeably.

One way of discussing the jobs would be to hand back the papers and draw, one at a time, each of the clusters on the board and ask the students who worked on that particular cluster to name the occupations they listed in the smaller circles. As the teacher writes these down in the small circles (and undoubtedly there will be more than six) the students can discuss the jobs.

Questioning Strategy for Each Cluster:

1. What does the worker do?
2. Whatare his/her responsibilities?
3. What skills, education and experience are required?
4. What equipment or tools are used by that person?
5. Does one job or worker depend on another?

The children should begin their occupational notebooks by mounting the job cluster worksheet in it.

Week 1 Unit 3

Have the students complete the "Manufacturing Match" worksheet. Discuss each question to be sure all students agree on the answers and understand the concept that training and education varies with type of occupation.

As time permits develop the concept of products or goods and services as it relates to the manufacturing cluster. Services: Doing something for someone. Examples include driving a delivery truck, repairing cars, service station attendants and preparing meals. Products: Materials or goods that are useful to people. Examples are airplane and car designs, roads, books, furniture and bread.

Questioning Strategy:

Is manufacturing more of a product or a service oriented set of occupations? Why?

Students should place this worksheet in their notebooks.

Week 1 Unit 4

Hand out "Hospital Hunt" worksheet and ask students to complete it following the instructions. They will need to complete the fringe benefits on a separate sheet of paper. Possible resource materials include dictionary and The Children's Dictionary of Occupations.

If time permits, use the following questioning strategy to identify and define health occupations.

Questioning Strategy:

1. What is a hospital administrator? What does she/he do?
2. What is an audiologist? What does she/he do?
3. What kinds of equipment does an audiologist use to examine a person's ears?

They use otoscopes, tuning forks, audiometer, etc. (An audiometer tests the sound frequency in both ears and bone conduction. An otoscope is used to look into the ears. Tuning forks test ability to distinguish between pitches.)

Continue questioning similarly about the other occupations.

Week 1 Unit 5

The following nonsexist, nonracist educational games have been developed by teachers to explain the concepts of various careers and to demonstrate the interrelationship among and between the various occupational clusters.

In order to allow each child the opportunity to play each game, the Friday sessions will be devoted to game playing. Each child should play at least one game a week, not repeating any until all are played.

After completion of a game, the participating children will complete a worksheet individually or as a group (each child will fill in his/her own worksheet). Refer to the worksheet for each game for instruction on maximizing the career education concepts related to that game.

The following worksheets have been developed for use with the games. Make them available to the students during unit five of each week (Fridays) so that they can have access to the worksheet that corresponds to the game they are playing.

Robot is the only game that does not have a worksheet. The children should refer to the Robot game instruction sheet and decide which way they want to play the game. This game requires more teacher facilitation than the others.

Worksheet List

Robot Game Instructions
Junior Executive
Super Sandwich
Endangered Species
Space Hop
Erector Set

WEEK TWO: SELF AND FAMILY AWARENESS ATTITUDES

Behavioral and Instructional Objectives

1. To learn about one's occupational heritage.
2. To develop an awareness of what it means to be male or female.
3. To understand and identify the influence of sex role stereotyping on their own behavior.

Materials Needed

Family Career Tree Worksheet
Pencils, scissors, magazines, paste, paper
TV Sex Role Stereotypes Worksheet

Week 2 Unit 1 (Family Occupational Tree)

Hand out the "Family Career Tree" worksheet and ask each student to complete it, including the collage listed in the fringe benefit section.

If children don't know what occupations their ancestors had, encourage them to take the worksheet home to complete it with the help of their parents.

Circulate among the students and assist them with learning something new about each of the jobs their family members had.

The worksheet and the collage may be hung around the room for display if teacher so desires before being placed in their notebooks.

Week 2 Unit 2 (Learning Sex Roles)

Remind students who took their family career trees and collages home to put them in their notebooks, or hang them up if they are being displayed.

The teacher might introduce the topic of sex role socialization by beginning thusly: "Today we are going to try to get some feeling for what it is like to be a boy or a girl. What would be different about your life if you had been born a member of the opposite sex? All of you girls write down the following question: If I were a boy _____ and answer it. All you boys write down the following question: If I were a girl _____ and answer it. Would your lives be different? If so, how?"

Ask the girls to discuss their answers and then have the boys discuss theirs. Allow for avid discussion, argument and expect disagreement. (I do that and I'm a girl!)

Then the teacher will ask the students to write down what they would like to be some day. Then ask them if it would be different if they were of the other sex. Discuss why or why not.

If time allows, make two lists on the blackboard with the students' help. One list will consist of words that describe what the children think it means to be male and the other what words describe what they think it means to be a female. Allow for discussion and exchange of opinions. Conclude with some remarks about how the picture we carry around in our minds of what it means to be a female or a male is called a sex role stereotype (write sex role stereotype on the board).

Homework assignment: Ask the children to watch two TV programs and observe the sex role stereotypes on these programs. Send them home with the TV Sex Role Stereotypes worksheet, and remind them to bring it back tomorrow.

Week 2 Unit 3

Ask the students to takeout the TV Sex Role Stereotype questionnaire they worked on last night.

Ask them what programs they watched. List them on the board and, if teacher wants, tabulate how many watched what shows.

Then turn the discussion to what kind of sex stereotyping goes on on TV.

Make two lists on the blackboard:

TV Tells Us What To Be Male Means:	TV Tells Us What To Be Female Means:

Questioning Strategy:

1. Is this the same or different from what they think it means to be male or female?
2. Do their mothers and sisters look like the females they observed on TV? If not, how are they different? Do they do the same kinds of things? If not, how are they different?
3. Do their fathers and brothers look like the males they observed on TV? If not, how are they different? Do they do the same kinds of things? If not, how are they different?
4. Compare the TV programs to your own life. How are they different from how you live and the kinds of things you do? What does this tell us about how realistic (like real life) the TV programs are?

   If the students appear to be having diffiuclty with the concept of realism, the teacher might provide examples of nonrealism such as bionic men and women and do most women look like Charley's Angels?

5. How has TV influenced your behavior? Has it influenced what you want to be when you grow up? Is this good or bad?

The teacher should point out the subtle influencing of TV on the development of sex roles in relation to the students' comments.

Homework assignment: Notice other factors that influence our behavior as males or females. Hint: Look at magazines, listen to other forms of media, and to conversations carried on around you.

Week 2 Unit 4

As a class, discuss the students' observations of factors influencing sex role development.

Questioning Strategy

1. How do we learn sex role stereotypes? (Teacher might want to write these on board.)
2. What is it about each of these influences that makes us think we should behave according to stereotypes for our sex?
3. How do you feel when you don't act like you think a boy or a girl should? What do your friends do or say when you don't behave according to sex role stereotypes? What do your parents do or say when you don't behave according to sex role stereotypes?
4. How does sex role stereotyping interfere with the manner in which you express yourself? With the games you want to play? The activities you want to do?
5. How might sex role stereotyping get in the way of a girl who wants to be a physician when she grows up? How will it affect a boy who wants to be a nurse?

Week 2 Unit 5

Refer to Week 1, Unit 5, page 4.

WEEK THREE: INTERDEPENDENCY OF OCCUPATIONS

Behavioral and Instructional Objectives:

1. To understand the concept of interdependency of various occupations in terms of the final product or service.
2. To gain an understanding of the concept of "production or assembly line" work.
3. To understand how attitudes can affect job performance.

Materials Needed

Dependency Defined Worksheet
Joint Accounts Worksheet
Paper Connections Worksheet
Assembly Line Worksheet
Working Attitudes Worksheet

Week 3 Unit 1

Have children complete "Dependency Defined" worksheet puzzle according to instructions.

Upon completion of the worksheet, ask the students what word they found (need)

To be certain that all students understand all the occupations involved, ask questions about each occupation, emphasizing the occupations in the false statements in particular.

Instruct the students to fill out missing "addends" in the "Joint Accounts" worksheet. Go over each of the problems to see if everyone has the right answer and understands the relationship between the occupations and the product.

The teacher needs to address the common denominator of these two worksheets, i.e., the dependency of various occupations upon other occupations to produce goods and services.

Students should add these worksheets to their notebooks.

Week 3 Unit 2

Suggested teacher approach. Hand out the "Paper Connections" worksheet. "Yesterday you completed two worksheets about the interdependency of various occupations. Today we want to look at the interdependency between the occupations in one industry--the paper industry."

Have the students complete the worksheet according to the instructions. If students have difficulty defining any of the occupations, direct them to a dictionary.

Questioning Strategy about the interrelationships of the various occupations

1. What would happen to the final product, the newspaper, if none of the photographer's pictures came out?
2. What would happen if the paper mill burned down?
3. Etc.

Direct them when finished with the worksheet to proceed with the Fringe Benefits assignment. If time permits ask for volunteers to read their news articles. Have the students add the worksheet and news article to their notebooks.

Week 3 Unit 3

Hand out the "Assembly Line" worksheet and ask the students to fill it out according to the directions. When everyone has completed the project to the best of their ability, start a class discussion.

Questioning Strategy

1. What jobs or activities are involved in a plant that cans fruit? What is the hierarchy of the jobs involved? They could be written on the chalkboard and ranked.
2. Follow the same procedure for the other assembly line products.

If time permits, discuss the second issue under Fringe Benefits. What goods cannot be produced by the assembly line method? (handcrafted articles) Why?

Students should place their worksheets in their notebooks.

Week 3 Unit 4

Hand out the "Working Attitudes" worksheets and ask students to complete it according to the instructions.

Ask what rating the students gave Worker #1 and why. Encourage differences of opinion. For example, how do their attitudes toward their own jobs at home affect their job performance? How will a _____ (whatever attitude rating the students gave Worker #1) affect this person's job performance?

Repeat this questioning strategy for Workers #2 and #3.

Ask the students to do the Fringe Benefits on a separate piece of paper. Ask volunteers, as time permits, to read what they have written about the kind of worker they, as an employer, would want, and why.

Have students place their worksheet and Fringe Benefits paper in their notebooks.

Week 3 Unit 5. Refer to Week 1, Unit 5, Page 4.

WEEK FOUR: GIRLS CAN! BOYS CAN!

Behavioral and Instructional Objectives

1. To create an awareness that choice of occupations should be based on ability and interest instead of sex or race.
2. To gain some awareness of the costs and benefits to both sexes of equality at home and on the job.
3. To encourage some awareness of how sex role stereotyping affects members of the opposite sex in terms of occupational choice.

Materials Needed

She Can, He Can worksheet
Oh Yes Girls Can! worksheet
For Boys Too! worksheet

Week 4 Unit 1

Hand out the "She Can, He Can" worksheet and ask students to complete it according to its instructions.

Questioning Strategy

1. What hidden word did you find? (Equal)
2. What does this word mean?
3. How does equality relate to a person's choice of career?

Select four children (2 girls and 2 boys) to debate the positive aspects of equality in terms of career choice and family roles. Choose four more (2 girls and 2 boys) to debate the negative side of these issues. Ask the rest of the children to act as an audience. The students in the audience should support the side with which they agree. After the debate, allow at least five minutes for all the students to discuss/talk before asking what they learned from the experience.

Students should add this worksheet to their notebooks.

Week 4 Unit 2

Hand out the worksheets, "Oh Yes Girls Can!" and "For Boys Too!" Direct the students to complete the worksheets as directed.

Questioning Strategy

Direct the questions to bring out the importance of skill and ability in being successful in an occupation.

Ask the students to volunteer an occupational title they have used from "Oh Yes Girls Can!" Discuss the skills a person in that occupation

needs and why each is important.

Repeat this strategy with an occupation from the "For Boys Too!" worksheet.

Continue this questioning strategy until the end of the session.

Children should put these worksheets in their notebook.

Week 4 Unit 3

1. Ask each student to write down what she/he plans to do when she/he grows up.
2. Collect the papers and divide the room in half according to sex. Rearrange the desks in two rows so that they face each other.
3. Randomly redistribute the papers. However, give the girls papers to the boys and vice versa.
4. Start at one end of the row and aska student to read what is on his or her paper in the following way. "I would like to be a _____ because (student justifies choice listed) . The student across (a member of the opposite sex) will challenge the first student's career expectations.

   Each student should then defend the challenge to the best of his/her ability.

   Note: When the words housewife/mother appear, the boys should change it to read househusband/father.

5. After this exercise, ask the students what they noticed about the reactions of the girls and the reactions of the boys. Why do they think the girls reacted as they did? Why do they think the boys reacted the way they did?
6. What did they learn from this exercise?

   The teacher should note the responses to questions five and six.

Week 4 Unit 4

This activity utilizes the format of a class meeting. The goals are:

1. To encourage the students to list to each other's opinions.
2. To encourage the students to think about and verbalize their ideas.
3. To be accepting of differences of opinion.

Have the students put their chairs in a circle or sit down in an informal circle on the floor. The teacher plays the part of the presiding officer--a neutral mediator.

"This meeting has been called to discuss several important issues."
(Introduce them one at a time, and go as far as time allows.)

The issues:
- Women as leaders
- What can women do that men cannot do?
- What can men do that women cannot do?
- Should a woman get paid as much as a man for the same job?
- Has there ever been a woman president of the United States?
  Why not? Could a woman be a president?

This session should be recorded in such a way that the students can listen to the tape at a later date to stimulate more discussion.

Week 4 Unit 5

Refer to Week 1, Unit 5, page 4.

WEEK FIVE

Behavioral and Instructional Objectives

1. There are a number of occupations that a person can consider for him or herself.
2. To gain an understanding of the importance of educational preparation for occupational success.
3. To understand how personal interests and skills are related to successful performance in an occupation.

Materials Needed

Career ABC's Worksheet
Riddling Careers Worksheet
Career Wheels Worksheet
My Job, My Interests and My Abilities
How School Prepares Me for my Job Worksheet

Week 5 Unit 1

Hand out the "Career ABC's" worksheet and instruct the children to write their own dictionary of careers based on their particular interests. (These instructions are slightly different than the ones listed on the top of the page.) The objective here is to let them think of a variety of careers that they might find interesting.

Encourage children to use The Children's Dictionary of Occupations to help them think of careers that begin with some of the more rarely used letters of the alphabet.

When the children are done, ask the first child what career she/he chose that begins with the letter A. Ask the second child what career she/he chose that begins with B, and so on. The children should be able to describe one aspect of the career that they have listed.

The children should put this worksheet intheir notebook.

Week 5 Unit 2

Hand out the "Riddling Careers" worksheet and instruct the children to fill in the blanks for each riddle.

As the children complete the first part of the worksheet, ask them to pair up with someone else who has also finished to work on the Fringe Benefits.

Week 5 Unit 3

Hand out the "Career Wheels" worksheet and instruct the students to complete it according to directions.

Upon completion discuss the careers in relation to each field. Be as specific as possible. For example, in the science career wheel ask what specific areas of science each occupation needs to know. Is there an overlap, i.e., are there some subjects all people working in science should know?

If time permits, ask if there are occupations listed that could incorporate several career wheels. For example, does a scientist also need to know how to do math? Does a doctor need to know how to write?

Students should place this worksheet in their notebooks.

Week 5 Unit 4

Hand out the "How School Prepares Me for My Job" worksheet. Ask each student to write the name of an occupation she/he would most like to do when she/he grows up. Instruct the students to write the names of school subjects she/he thinks would be important in preparing him/her for this occupation.

In the second half of the worksheet, ask the student to write why she/he thinks each school subject would be important. Write the reason for taking subject number one on line number one and so forth.

As the students finish this worksheet, hand out the worksheet on "My Jobs, My Interests and Abilities." Ask them to write the name of the same occupation they used in the first worksheet in the center box. In the small boxes instruct them to write the student's individual interests and abilities that would make them successful in the job. Examples are, "I like to be outdoors," "I am strong," and "I am a good reader."

As time allows, ask volunteers to share their worksheets with the rest of the class.

Students should place these worksheets in their notebooks.

Week 5 Unit 5

Refer to Week 1, Unit 1, page 4.

WEEK SIX: GAME REVIEW

Behavioral and Instructional Objectives

1. To re-examine the occupations presented in the educational games and the career cluster to which each belongs.
2. To realize that most of the occupations presented in these games require relatively high levels of education and/or skill.
3. To understand that what is critical in performance of these occupations is ability and interest, not sex or race.
4. To comprehend the interdependence of occupations within the occupational clusters and between them.

Materials Needed

The following worksheets from their Notebook of Occupations:

Junior Executive
Space
Erector Set
Super Sandwich
Endangered Species

Natural Resources Scramble Worksheet
Building Careers Worksheet
The two Junior Executive handouts
The Super Sandwich handout
The Space Hop handout
The Erector set handout

Week 6 Unit 1 Junior Executive--Business & Office Cluster

Ask children to take out the "Junior Executive" worksheet from their occupational notebooks. Have each child choose one career from his/her worksheet list to share with the rest of the class.

For example, "I would like to be a _____. A _____ belongs to the _____occupational cluster. In order for me to be a _____ I would need _____education or training and/or experience.

The teacher should list each occupation on the board (She/he may want to duplicate the worksheet on the board and record the children's answers.) If a child selects a duplicate occupation, ask him/her to choose another.

Questioning Strategy:

1. What occupations in the Junior Executive game did you learn about?
2. Are there any of these occupations that could be performed only by a woman? Why? By a man? Why?

3. Give the students the two Junior Executive handouts. After they have read them question them over their content. Do the handouts discuss the careers in relation to sex or in terms of responsibility? For example: Bank teller discusses receiving money, etc. Does it indicate the sex of the teller?
4. What do the Junior Executive game and the handouts teach us about business occupations?
5. Would it be acceptable for any person in our class to be a bank president? How about a display worker? Why or why not?

Have the students mount their worksheet and handouts in their notebooks.

Week 6 Unit 2 Foods, Nutrition, Home Economics and Consumer Education

Have children take out the "Super Sandwich" worksheet from their occupational notebooks. Have each child choose one occupation from his/her worksheet list to share with the class.

For example: "I would like to be a _____. A _____ belongs in the _____ occupational cluster. In order for me to be a _____, I must have _____ education and/or experience."

The teacher should list the occupations on the board. (She/he may want to duplicate the worksheet format on the blackboard.) If a child selects a duplicate occupation ask him/her to choose another.

Questioning Strategy

1. We have listed many occupations that relate to nutrition and food preparation. Why do we need to know about how our bodies use the nutrients we eat?
2. What kinds of food do we eat that are necessary for our bodies? What foods do we eat that are harmful or unnecessary for our bodies?
3. Give each child the "Super Sandwich" handout and read out loud the definitions of nutritionist, cook and chef. Can anyone in our class become a nutritionist? A cook? A chef?
4. Who usually prepares the food at your home? Have you ever tried to prepare a meal? How many of your fathers prepare meals?
5. What kind of information does the picture on the handout tell you about the kinds of occupations a nutritionist might have? What kind of education and/or training might such a person have?
6. Pursue any issues the children might want to discuss.

Have the students place their worksheets and handouts in their notebooks.

Week 6 Unit 3 Transportation

Have the students take out the "Space Hop" worksheet from their notebooks. Have each child choose one occupation from his/her list to share with the class.

For example: "I would like to be a _____. A _____ belongs to the _____ occupational cluster. To be a _____ I must have _____ education or training and/or experience."

The teacher should list the occupations on the board. (She/he may want to duplicate the format of the worksheet on the board.) If a child duplicates an answer have him/her choose another.

Questioning Strategy:

1. The "Space Hop" game has introduced us to many occupations. What occupation requires you to be physically fit, have a college education and special training? (eg., astronaut)
2. How many of you would like to travel in space one day? Will it be all right for both men and women to be space travelers? Why or why not? To be astronauts? (The Soviets have women and men cosmonauts who have been in space.)
3. What other occupations must astronauts depend on before they can blast off into space? (Include aspects of a space program--refer to The Children's Dictionary of Occupations. Astronauts are listed under public service.)
4. Are there any special occupations astronauts depend on to return from space?
5. What is a more common form of space travel that many people do everyday? Many of you have used this form of space travel (airplanes).
6. What occupations are involved in the airline industry? Are these occupations similar to space travel occupations?

Have the students put their worksheets back in their notebooks.

Week 6 Unit 4 Natural Resources and the Environment

Ask the children to take the "Endangered Species" worksheet from their occupational notebooks. Have each choose one career from his/her worksheet list to share with the rest of the class.

For example: "I would like to be a _____. _____belongs in the _____occupational cluster. In order for me to be a _____, I would need _____education or training and/or experience.

The teacher should list each occupation on the board. (She/he might want to simply duplicate the format of the worksheets on the board.) If a child selects a duplicate career, ask him/her to choose another.

Questioning Strategy

1. Of the careers we have listed, how many belong in the Natural Resources and the Environment cluster? (The teacher may want to refer to the Career Cluster Index in the back of The Children's Dictionary of Occupations.)
2. What other occupations can you think of that belong to the Natural Resources and the Environment cluster?
3. What skills, training, or education is required for each of the occupations listed?
4. How do these careers relate to concepts you learned when you played the "Endangered Species" game?

Hand out the "Natural Resources Scramble" worksheet. "Here is a worksheet that identifies other occupations in the Natural Resource and the Environment cluster. You can complete this whenever you have time and add it to your notebook. Remember to put your "Endangered Species" worksheet back into your notebook.

Week 6 Unit 5 Construction

Hand out the "Building Careers" handout and instruct the students to complete the exercise, including the fringe benefits.

Questioning Strategy

1. What picture did you all end up with? (a house)
2. Is there anyone who does not know what a carpenter, a roofer, an electrician, a mason, or an architect is and what they do? Discuss these occupations as needed.

Ask the students to take the "Erector Set" worksheet from their occupational notebooks to use for reference in answering questions.

Questioning Strategy

1. Occupations in the construction cluster require a variety of education and/or training. Which occupations would require college education? Why? Which occupations require training or apprenticeship (may have to define apprenticeship). Some need no skill or training at all. What are examples of these occupations?
2. What a structure is being built which occupation does what work first? What is the first step in building a structure? The second?
3. Are there any occupations in the construction cluster that can only be performed by men? Why? (Children will probably bring up the concept of strength--what constitute strength? Weak men cannot do certain kinds of work. Both strong men and women can do work requiring strength.)
4. Are there any occupations in the construction cluster that can only be performed by women? Why?

Have children put their worksheets into their notebooks.

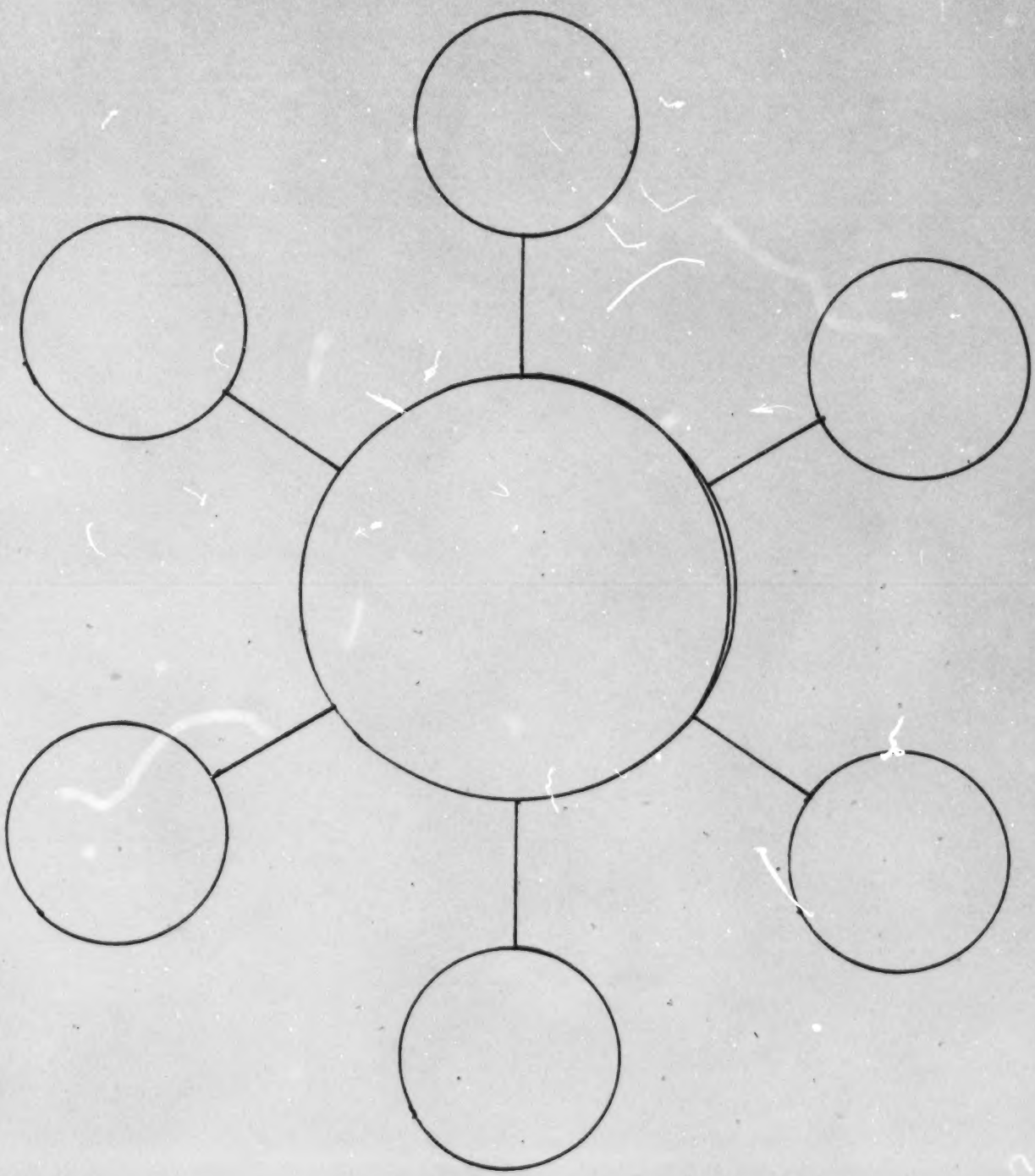
The teacher may want to suggest the children take the notebooks home to share with their parents or keep them in class for reference for other classroom projects.

WORKSHEETS* UTILIZED IN THE EXPANDING OCCUPATIONAL AWARENESS OF FOURTH GRADE CHILDREN MODULES

These will constitute the bulk of the occupational notebooks the children will develop

*Some of these worksheets were adapted from At Least A Thousand Things To Do, C. Farnette, I. Forte, and B. Loss. Nashville: Incentive Publications, 1977, with permission for classroom use granted by the publisher.

JOB CLUSTER WORKSHEET



MANUFACTURING MATCH

Factory workers produce goods we use every day such as paper towels, cars and clothes. Use this chart, which describes the five levels of factory workers, to answer the questions following the chart.

Factory Occupational Levels	Job Descriptions	Education or Suggested Training
Technician	Puts engineer's designs into action--may assist in development and designing of parts	High school plus two-year degree program at junior college or vocational school
Craftsperson	Makes the tools, molds, patterns and instruments needed in the production process	High school and apprenticeship (2-5 yrs.)
Skilled Worker	Makes, operates and assembles the machinery and equipment	Vocational or technical school; on the job training
Semi-skilled Worker	Runs the machines used in manufacturing; assembles parts	Brief on-the-job instruction
Unskilled Worker	Includes jobs requiring physical labor--digging, loading, mixing	No special training

1. Sue wants to assist in the designing of airplanes. What will her occupational level be? _____ What training will she need? _____
_____

2. Brad likes sewing his own clothes. He wants to be a sewing machine operator. What will his occupational level be? _____ What training will he need? _____

3. John likes to build model cars from diagrams. He would like to become a foundry pattern maker and make patterns following a blueprint. What level worker will he be? _____ What training will he need?
_____

4. Linda wants to assist in developing better computers. What level worker will see be? _____ What training will she need? _____
_____

5. Claire, an auto assembly-line worker, has a job attaching fenders to cars. What level worker is she? _____

6. Buck is looking for a job loading and unloading trucks. What training will he need? _____

HOSPITAL HUNT

Find and circle the "jobs in a hospital" hidden in the puzzle.

e	g	m	p	n	j	e	d	s	t	r	a	t	
m	l	e	h	h	o	s	p	i	t	a	l	g	
l	a	d	y	s	b	t	c	f	o	z	a	x	
n	u	r	s	e	s	a	i	d	e	l	d	r	
a	u	d	i	o	l	o	g	i	s	t	m	a	
d	m	o	c	s	a	e	r	g	d	e	i	y	
s	e	c	a	i	b	s	b	k	i	c	n	t	
t	d	s	l	c	w	r	a	b	e	h	i	e	
c	l	o	t	k	o	u	f	s	t	n	s	c	
a	c	p	h	a	r	m	a	c	i	s	t	h	
g	i	r	e	j	k	n	x	t	c	c	r	n	
p	n	o	r	d	e	r	l	y	i	b	a	i	
i	e	h	a	i	r	q	u	m	a	s	t	c	
r	x	e	p	w	o	m	v	b	n	a	o	i	
f	l	b	i	m	z	a	s	k	i	l	r	a	
p	h	y	s	i	c	i	a	n	f	t	o	n	
t	w	e	t	n	g	d	e	n	t	i	s	t	

Words to find:

adm'.nistrator
au .iologist
de ntist
ph irmacist
maid
nurse's aide
orderly
lab worker
physician
x-ray technician
dietician
physical therapist

List other jobs you might find in a hospital.

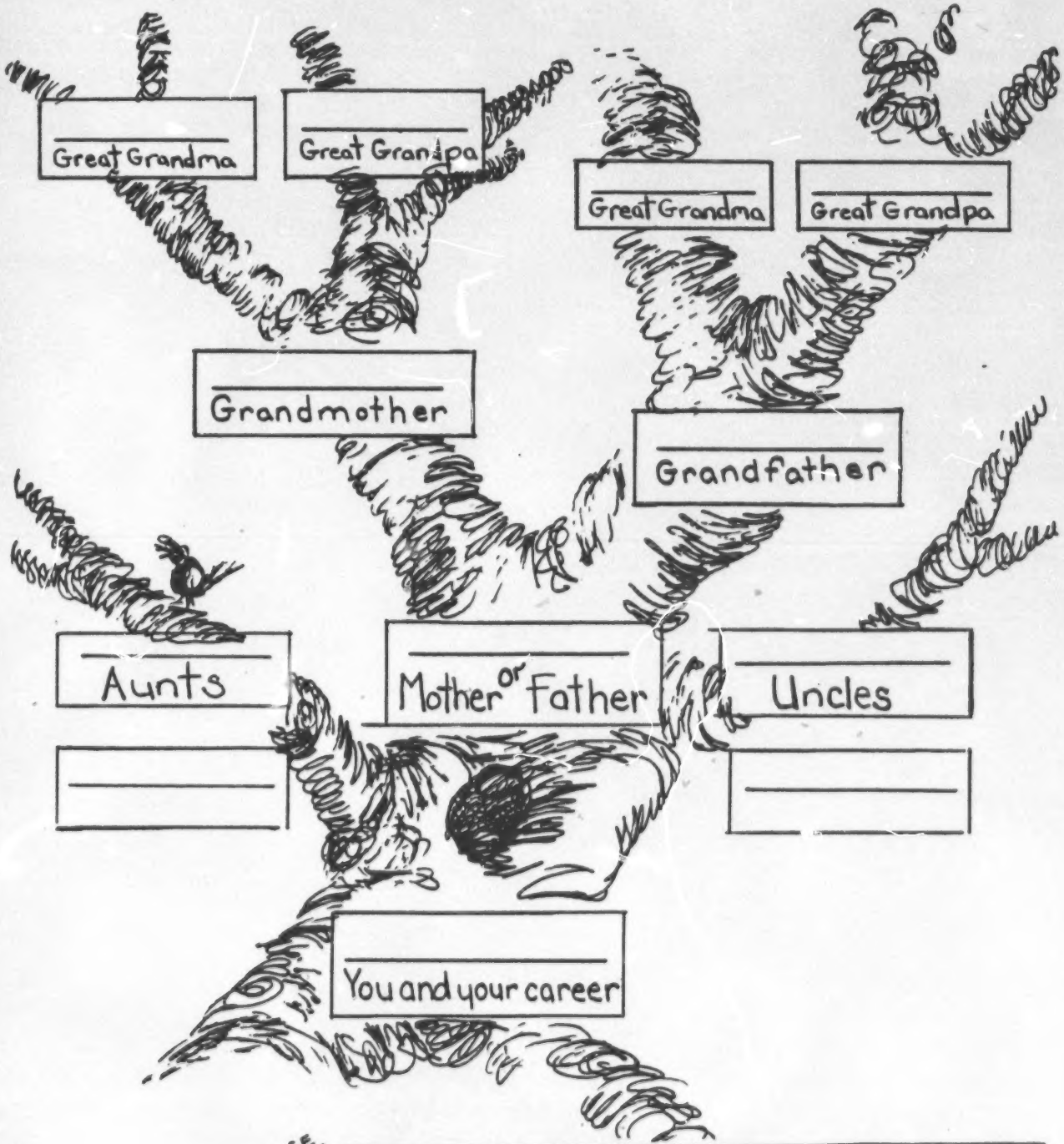
_____

_____

Describe what duties these hospital workers perform. Use resource materials if needed.

FAMILY CAREER TREE

Explore the occupations held by your family members. Complete the career tree by writing the appropriate jobs in the spaces below. Learn something new about each occupation before you list it.



FRINGE BENEFITS

Make a collage illustrating all the careers on your family career tree.

TV SEX-ROLE STEREOTYPES

Watch two TV programs. Answer the following questions.

1. The two programs I watched were _____ and _____.

2. Name the main characters in each program.

_____ _____ _____

_____ _____ _____

_____ _____ _____

3. What kinds of clothing did the boys and men wear?_____.

4. What kinds of clothing did the girls and women wear?_____.

5. What things (jobs and activities) did the women do?_____.

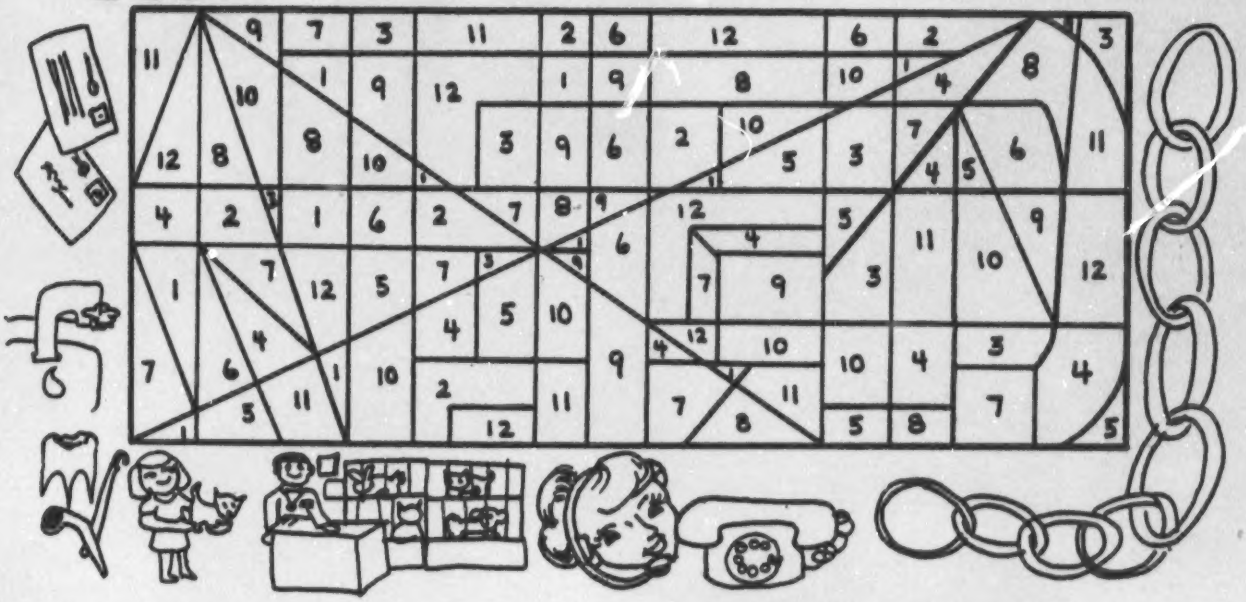
6. What things (jobs and activities) did the men do?_____.

7. What things did the boys do?_____.

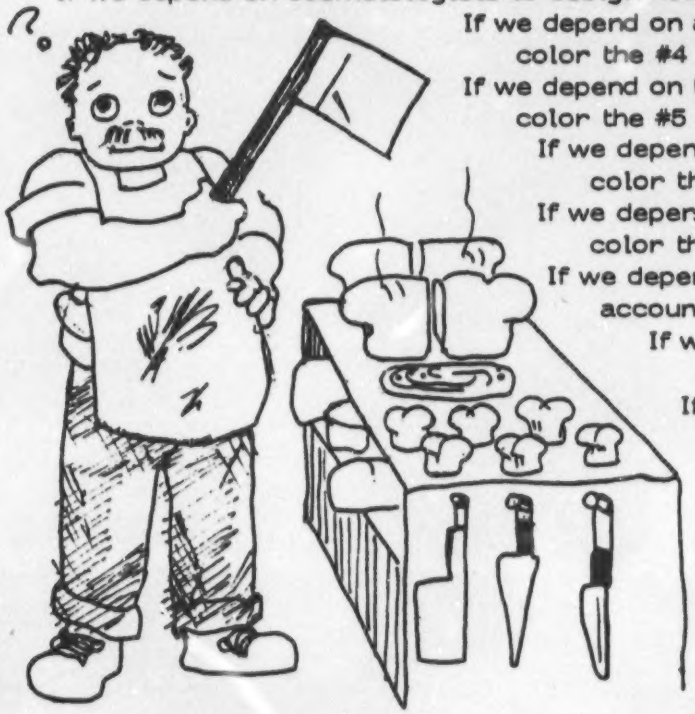
8. What things did the girls do?_____.

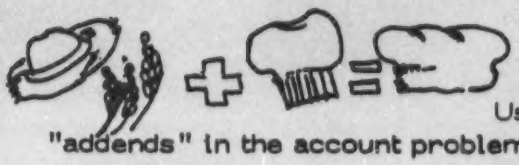
DEPENDENCY DEFINED

To solve the puzzle and find the hidden word, read the sentences below. If the statement is <u>true</u>, color the numbered spaces as directed.



If we depend on veterinarians for the health of our pets, color the #1 spaces.
If we depend on plumbers to fix leaking faucets, color the #2 spaces.
If we depend on cosmetologists to design houses, color the #3 spaces.
If we depend on automobile mechanics to fix cars, color the #4 spaces.
If we depend on telephone operators to install phones, color the #5 spaces.
If we depend on butchers to prepare baked goods, color the #6 spaces.
If we depend on dentists for the care of our teeth, color the #7 spaces.
If we depend on bankers to provide savings accounts for our money, color the #8 spaces.
If we depend on police to deliver our mail, color the #9 spaces.
If we depend on electricians for our water supply, color the #10 spaces.
If we depend on librarians to help us find books, color the #11 spaces.
If we depend on sales clerks to help us find the goods we wish to buy, color the #12 spaces.





JOINT ACCOUNTS

Use this list of workers to fill in the missing "addends" in the account problems below.

clerk	photographer	butcher	roofer
electrician	cabinet maker	farmer	waiter
file clerk	draftsman	secretary	pupil

1. Baker + _____ bread

2. Rancher + _____ steak

3. Lumberjack + _____ furniture

4. Model + _____ picture

5. Principal
Teacher
+ _____ school

6. Cook
Waitress
+ _____ restaurant

7. Manager
Stock person
+ _____ department store

8. Construction worker
Engineer
+ _____ bridge

9. Executive
+
Receptionist
Bookkeeper
+ _____ office

10. Architect
Carpenter
+
Plumber
+ _____ house

Choose one of the following products and make a list of necessary "addend" workers.

motion picture automobile hospital

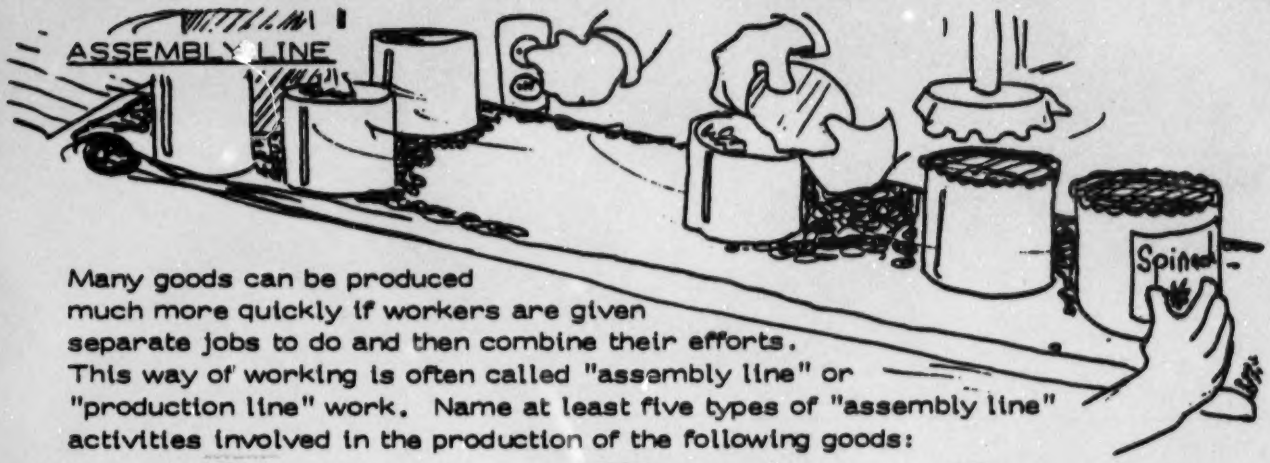
PAPER CONNECTIONS

Match the jobs with the illustrations to show the many occupations involved in producing a newspaper.

trucker	lumberjack	photographer
reporter	reader	editor
artist	typesetter	proofreader
paper mill worker		newspaper carrier

Write the name of the occupation beside each drawing.

Write a news article about any one of the occupations involved in producing a newspaper. Illustrate your article.



Many goods can be produced much more quickly if workers are given separate jobs to do and then combine their efforts. This way of working is often called "assembly line" or "production line" work. Name at least five types of "assembly line" activities involved in the production of the following goods:

Canned Fruit

Jobs involved:

_____

_____

_____

_____

_____

_____

_____

Automobiles

Jobs involved:

_____

_____

_____

_____

_____

_____

_____

Shirts

Jobs involved:

_____

_____

_____

_____

_____

_____

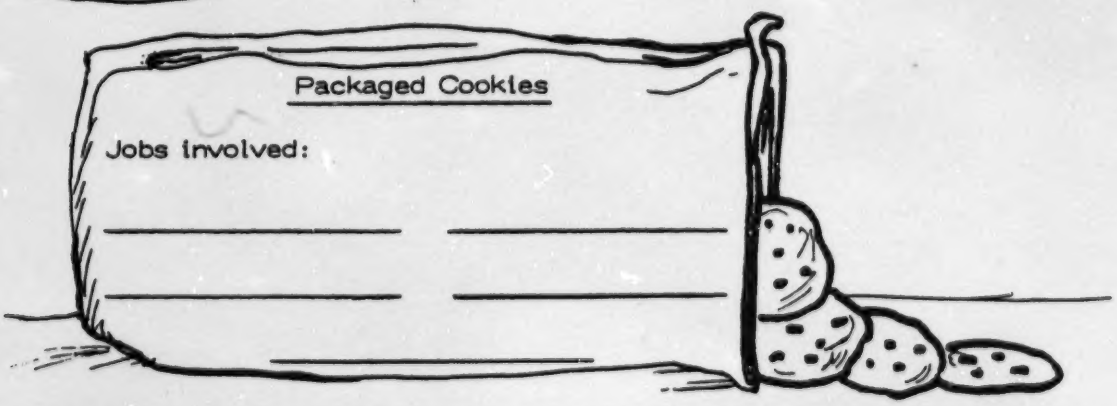
Packaged Cookies

Jobs involved:

_____ _____

_____ _____

_____



Write a paragraph about the advantages of "assembly line" production. Can you think of goods that cannot be produced by the "assembly line" method?

WORKING ATTITUDES

The way people feel about their jobs can affect how well they perform. Use this "Work Attitude Scale" to rate the workers' attitudes described below.

Work Attitude Scale

Ratings Poor 1 — Fair 2 — Good! 3

Worker No. 1

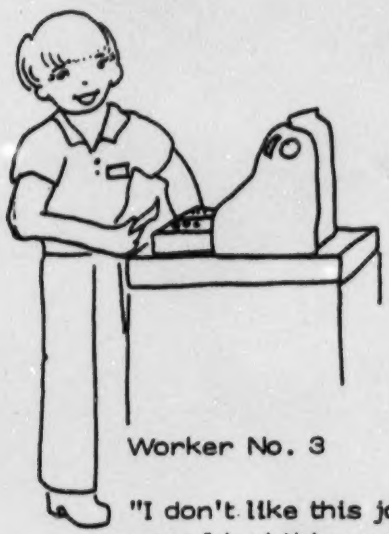
"I'm just doing this job for the summer, so why should I do my best? I'll just do what they tell me."

Attitude Rating _____

How will this attitude affect job performance?

_____

_____



Worker No. 2

"I'm glad I have this summer job because I'll need work experience to get the job I want. I'm going to prove to myself and others that I can be a good worker."

Attitude Rating _____

How will this attitude affect job performance?

_____

_____

Worker No. 3

"I don't like this job--it's just like the other ones I had this summer. Guess I'll quit! I can always find a better job."

Attitude Rating _____

How will this attitude affect job performance?

_____

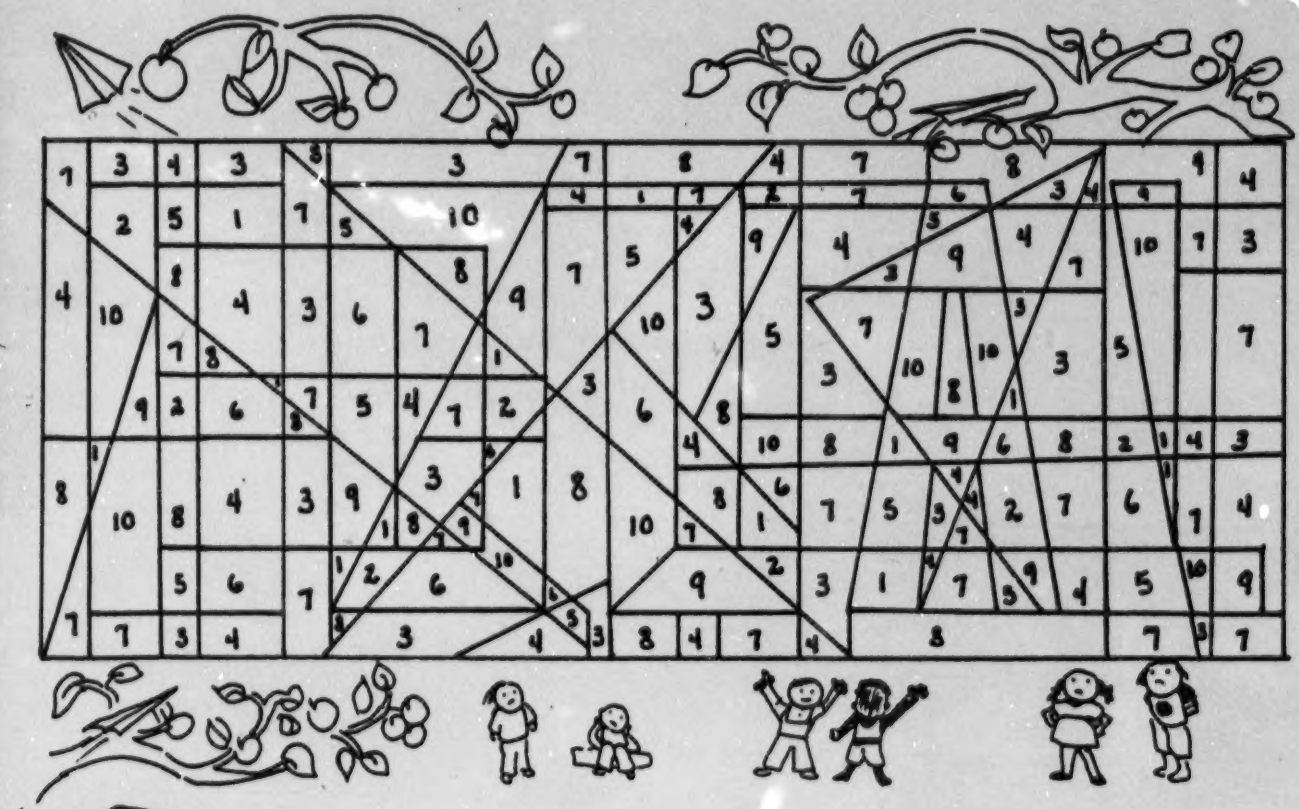
_____

FRINGE BENEFITS

Imagine you are an employer. Select the worker you would want to have work for you and tell why.

SHE CAN, HE CAN

To solve the puzzle and find the hidden word, read the sentences below. If the statement is true, color the numbered puzzle spaces as directed.



If a girl can be a doctor, color the #1 spaces.
If a boy can be a nurse, color the #2 spaces.
If girls are smarter than boys, color the #3 spaces.
If boys are smarter than girls, color the #4 spaces.
If girls can be race car drivers, color the #5 spaces.
If boys can be cooks, color the #6 spaces.
If only girls can be dress designers, color the #7 spaces.
If only boys can be pilots, color the #8 spaces.
If girls can be what they want to be, color the #9 spaces.
If boys can be what they want to be, color the #10 spaces.

Write a newspaper article telling why you think boys and girls should have equal chances to be what they want to be.

OH YES GIRLS CAN!

Women now hold many jobs that were once thought to be occupations held chiefly by men. Examples of such occupations are:

physician	engineer	construction worker
lawyer	mechanic	police officer
mail carrier	banker	pharmacist

1. Choose three of the occupations listed above and write their names in the "office" door spaces.

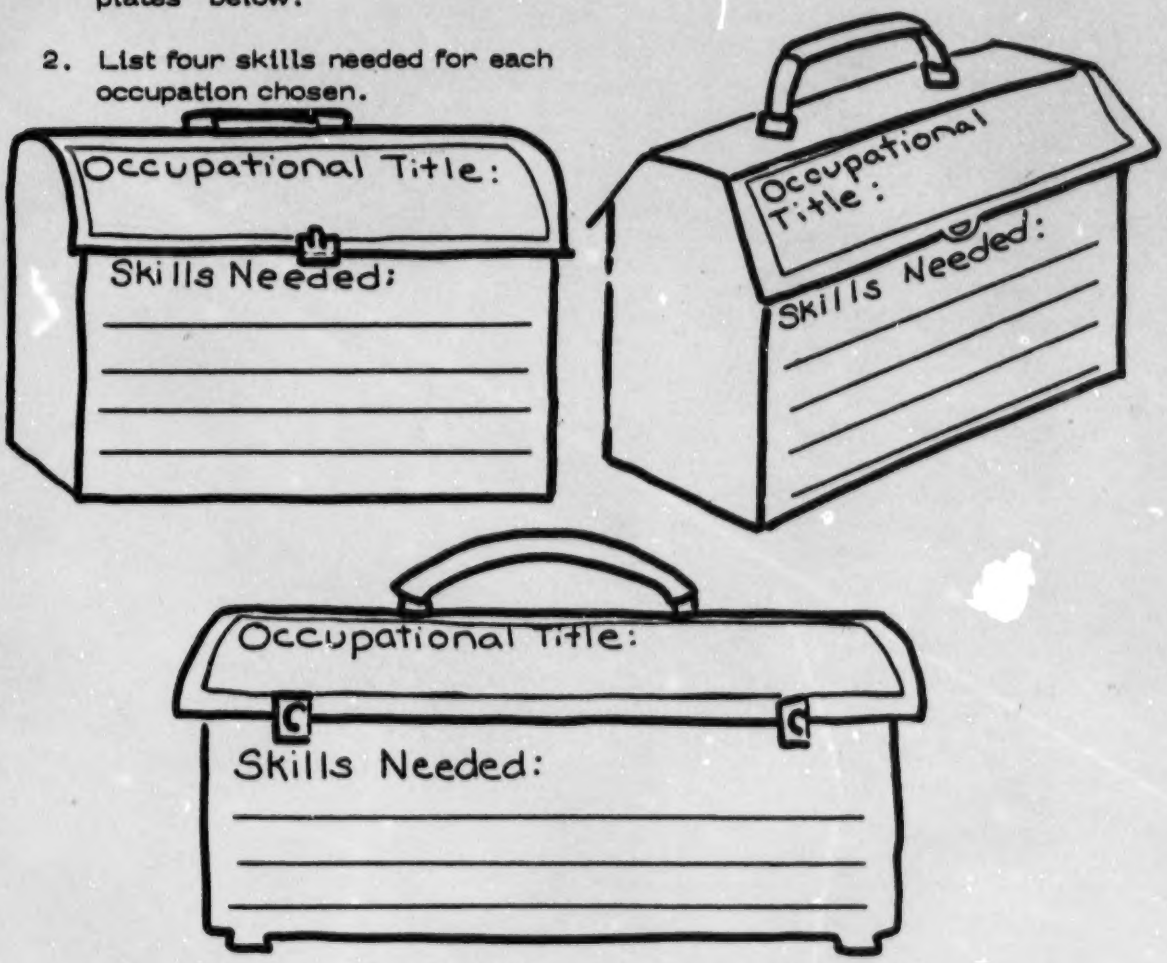
2. List four skills needed for each occupation chosen.

FOR BOYS TOO!

Men now do many jobs that were once thought to be occupations held chiefly by women. Examples of such occupations are:

nurse	file clerk	child care worker
model	dressmaker	telephone operator
beautician	secretary	flight attendant

1. Choose three of the occupations listed and write their names on the lunch box "name plates" below.
2. List four skills needed for each occupation chosen.



CAREER ABC'S

Write your own dictionary of careers. Identify interesting careers that begin with the letters of the alphabet and describe them.

Aa _____

Bb _____

Cc _____

Dd _____

Ee _____

Ff _____

Gg _____

Hh _____

Ii _____

Jj _____

Kk _____

Ll _____

Mm _____

Nn _____

Oo _____

Pp _____

Qq _____

Rr _____

Ss _____

Tt _____

Uu _____

Vv _____

Ww _____

Xx _____

Yy _____

Zz _____

RIDDLING CAREERS

Read the riddles and write the occupation which answers each riddle in the space provided.

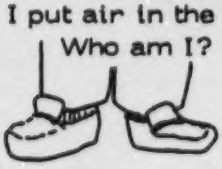
My razor and scissors I use with care,
You come to me to cut your hair.
Who am I? _____

I use colors of reds, greens and blues,
And make your house the color you choose.
Who am I? _____

I make cookies, cakes and breads.
You come to me when you want to be fed.
Who am I? _____

By holding up my hand I can show
When the traffic should stop and go.
Who am I? _____

I fill the tank with gasoline in the job I do.
I put air in the tires, and check the battery, too.
Who am I? _____



I sing and dance until my job is done.
The purpose of my career is for you to have fun.
Who am I? _____

I work with wires and current to brighten your night.
My skills allow you to flip the switch and turn on the light.
Who am I? _____

I use paper, books and chalk to show
What every boy and girl should know.
Who am I? _____

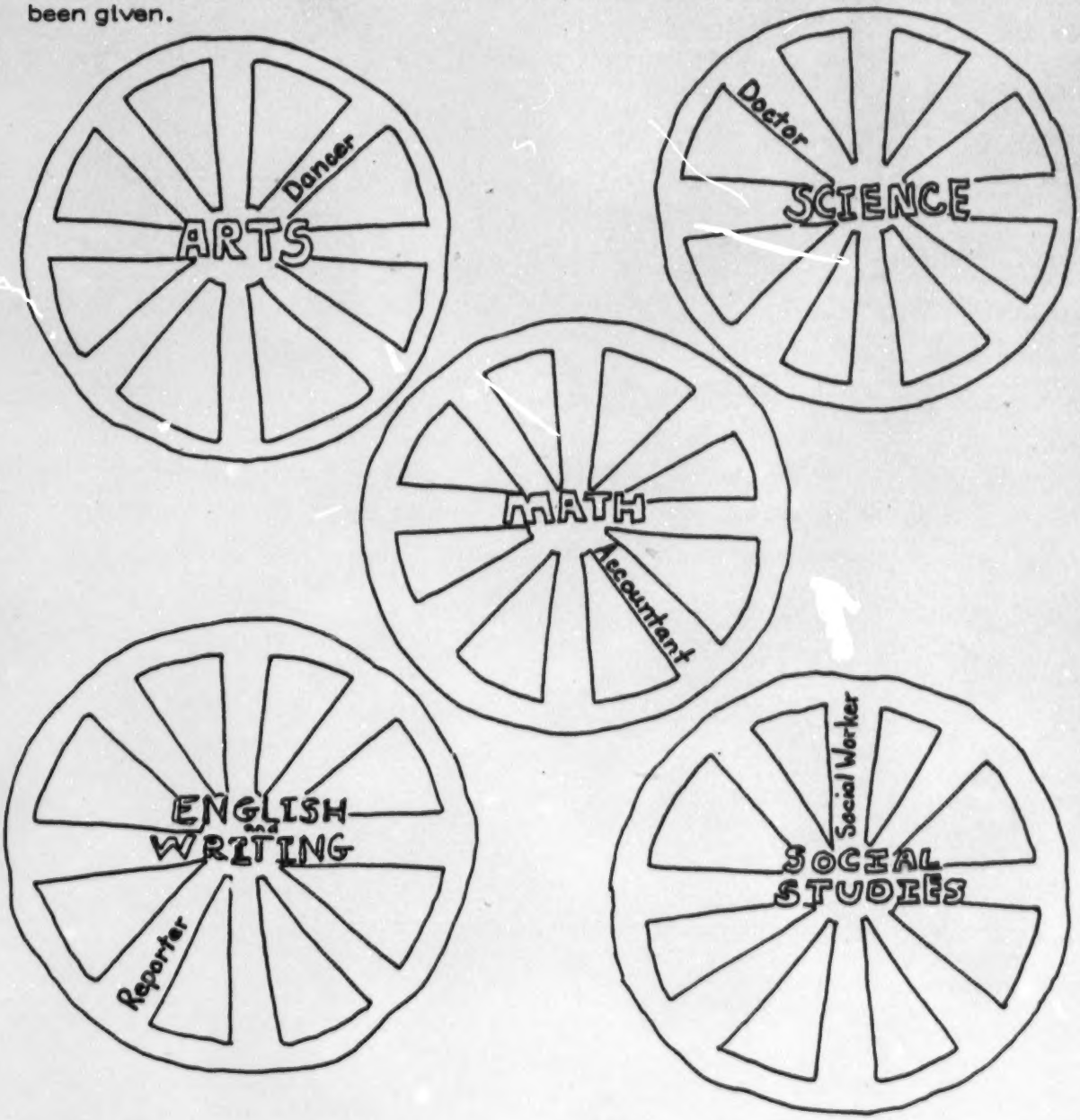
I teach how to throw the ball
And when you tumble, how not to fall.
Who am I? _____

FRINGE BENEFITS

Work with a friend. Make up three occupation riddles. Give them to classmates to answer.

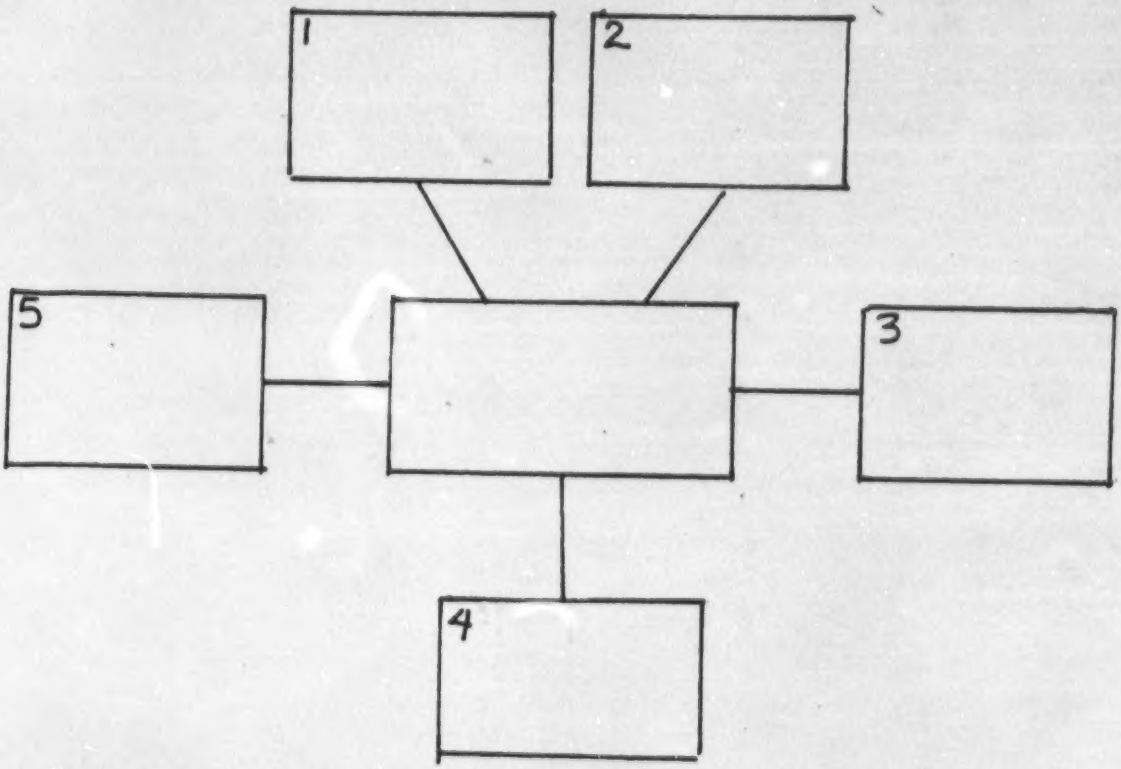
CAREER WHEELS

The skills you are learning in school are related to success in many occupations. Complete these career wheels by writing the jobs on the spokes of the wheels associated with the subjects on the wheel hubs. Note: An example for each has been given.



HOW SCHOOL PREPARES ME FOR MY JOB

Write the name of the occupation you would most like to have when you grow up in the center box. Write the names of the school subjects you think will be important in preparing you for this occupation. Note: You can draw additional boxes if you want.



Write why you think the subject you listed in box 1 is important to your future occupation on line 1. One line 2, write the reason the subject in box 2 would be useful and so on.

1. _____

2. _____

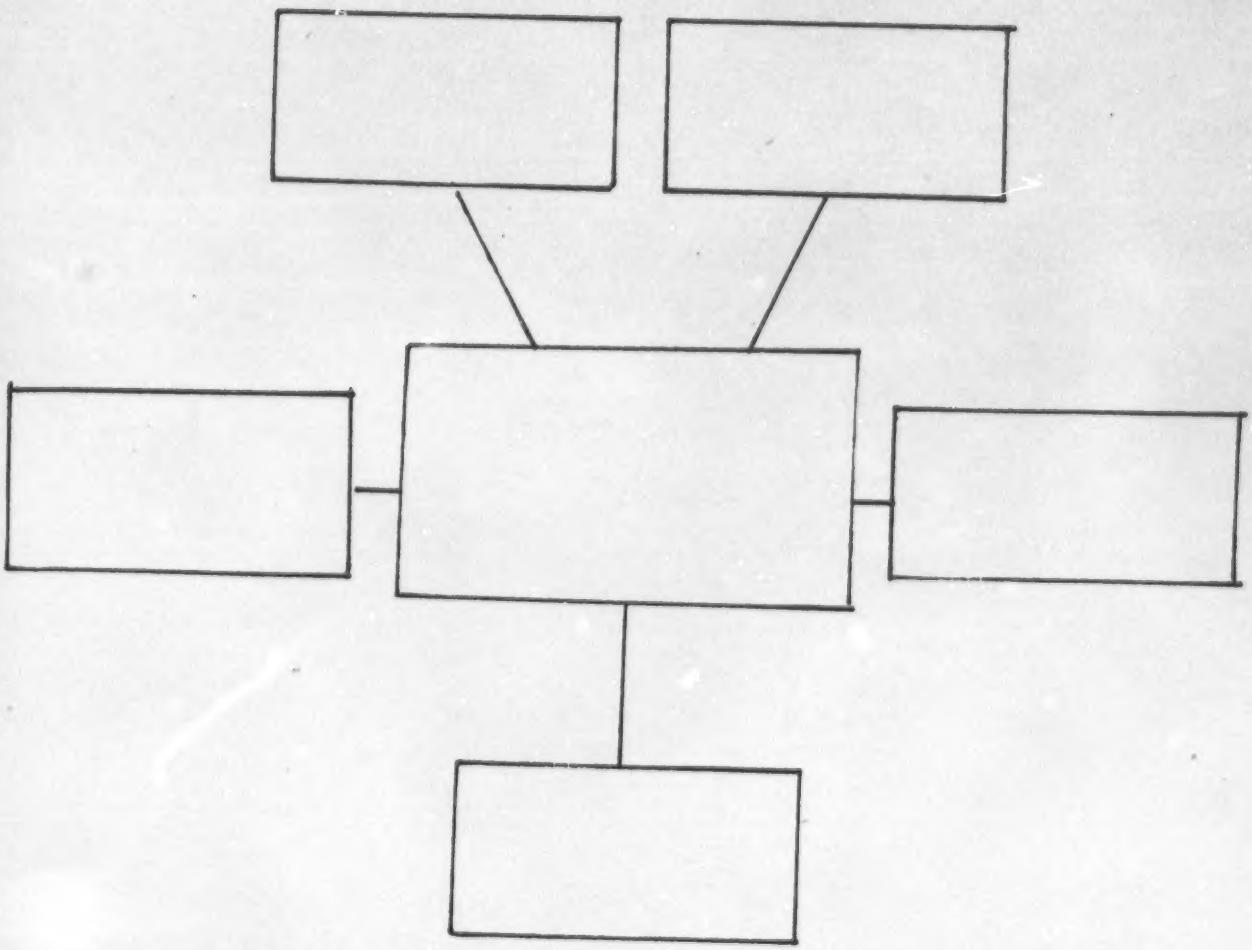
3. _____

4. _____

5. _____

MY JOB, MY INTERESTS AND MY ABILITIES

Write the name of the job you chose in the first worksheet in the center box. In each of the smaller boxes write the interests and abilities you have which will help to make you successful in your job. Note: you can draw more boxes if you want.



ROBOT GAME INSTRUCTION

Activity 1:

Show the Robot card. What is a robot?

"A robot cannot think for itself.
Its head is like a cupboard shelf.
What comes out is what went in.
A programmed person with a brain of tin."

What does the poem say? Would you want to be a robot? The person who has the robot at the end of the game is the unlucky one or loser.

What does it mean to be unlucky?

Activity 2:

Lay down, face up, each of the chosen pairs.
These cards show people doing different jobs.
What is a job?
Can you think of some other words that mean jobs?
What jobs are people doing on these cards?
Can you see a job that women can't do?
Or Men?
Can you think of some other jobs that scientists or construction workers, etc., could do besides those shown on the cards?

Choose which way you will play the game--as in "Slapjack," "Concentration," "Charades," "Who Am I" or according to activity one or activity two. Try to answer the questions listed under those activities.

JUNIOR EXECUTIVE

Instructions: List at least five occupations that are related to the Junior Executive game that interest you in the column under Occupations. Name the cluster it belongs to in that column. List the kinds of education, training and/or experience the occupations you listed require. Hint: You might find talking to the others who played the game with you will help you think of occupations related to the world of business, including office work. You might also want to look at The Children's Dictionary of Occupations.

OCCUPATION	OCCUPATIONAL CLUSTER	TRAINING NEEDED

SUPER SANDWICH

Instructions: List at least five occupations that are related to the Super Sandwich game that interest you in the column under occupations. Name the cluster it belongs to in that column. List the kinds of education, training and/or experience the occupations you listed require. Hint: You might find talking to the others who played the game with you will help you think of occupations in foods and nutrition and home economics and consumer education. You might also want to look at The Children's Dictionary of Occupations.

OCCUPATION	OCCUPATIONAL CLUSTER	TRAINING NEEDED

SPACE HOP

Instructions: List at least five occupations that are related to the Space Hop game that interest you in the column under occupations. Name the cluster it belongs to in that column. List the kinds of education, training and/or experience the occupations you listed require.
Hint: You might find talking to the others who played the game with you will help you think of occupations in the transportation cluster. You might also want to look at The Children's Dictionary of Occupations.

OCCUPATION	OCCUPATIONAL CLUSTER	TRAINING NEEDED

ENDANGERED SPECIES

Instructions: List at least five occupations that are related to the Endangered Species game that interest you in the column under Occupations. Name the cluster it belongs to in that column. List the kinds of education, training and/or experience the occupations you listed require. Hint: You might find talking to the others who played the game with you will help you think of occupations related to conservation of endangered species. You might also want to look at The Children's Dictionary of Occupations.

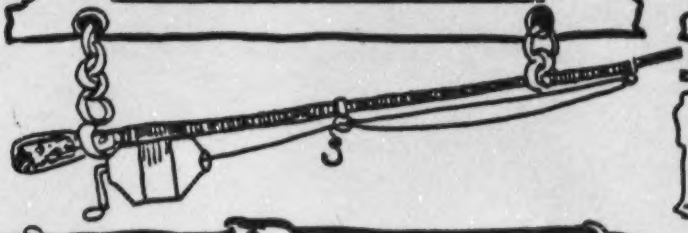
OCCUPATION	OCCUPATIONAL CLUSTER	TRAINING NEEDED

NATURAL RESOURCE SCRAMBLE

Unscramble these words to identify Agriculture and Natural Resource occupations. (Note: Look for the letter and hidden picture hints.)

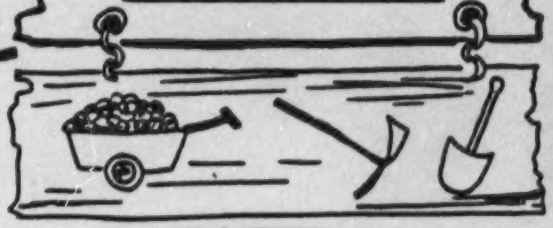
SHMEARINF

F _____



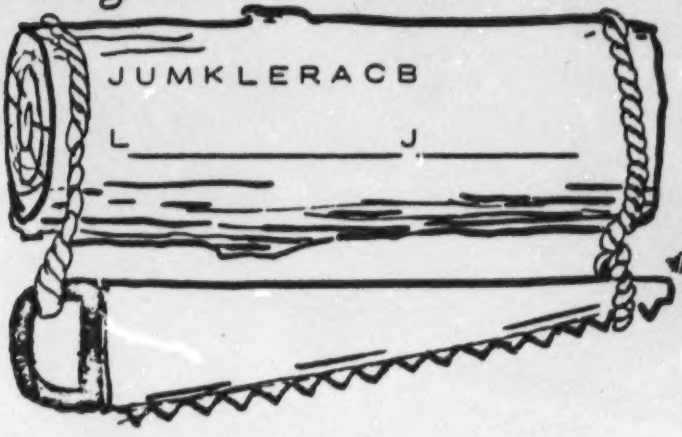
IMERN

M _____



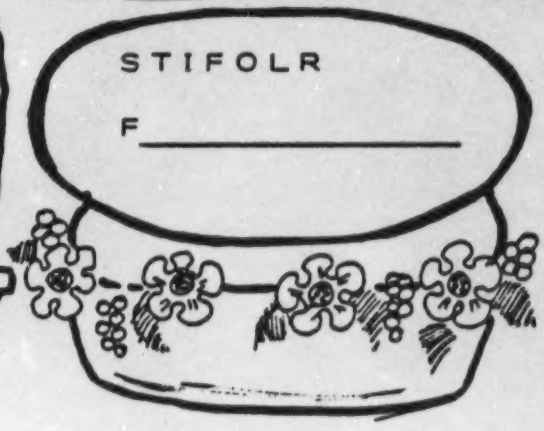
JUMKLERACB

L _____ J _____



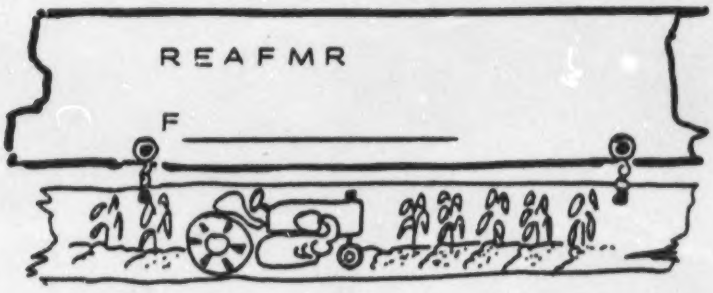
STIFOLR

F _____



REAFMR

F _____



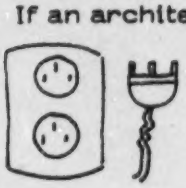
FRINGE BENEFITS

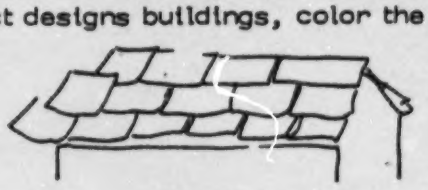
Design signs for these occupations:

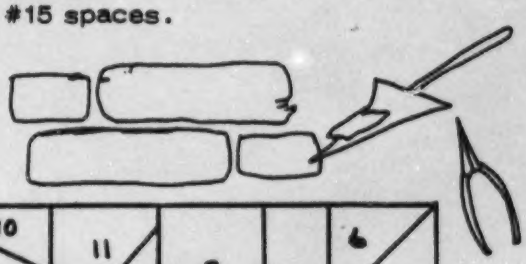
Geologist	Forester
Harvester	Botanist
Logger	Soil Conservationist
Ranger	Landscape Architect
Oil Driller	Trapper

BUILDING CAREERS

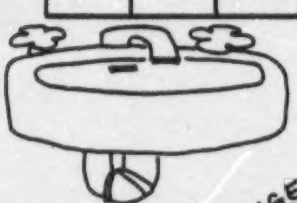
If a carpenter makes door frames, color the #1 spaces.
If a carpenter hangs wallpaper, color the #2 spaces.
If a carpenter installs plumbing, color the #3 spaces.
If a carpenter builds stairs, color the #4 spaces.
If a carpenter puts up walls, color the #5 spaces.
If a roofer lays blocks, color the #6 spaces.
If a roofer uses shingles, color the #7 spaces.
If a roofer mixes concrete, color the #8 spaces.
If an electrician installs insulation, color the #9 spaces.
If an electrician installs siding, color the #10 spaces.
If an electrician installs wiring and circuit breakers, color the #11 spaces.
If a mason builds foundations, color the #12 spaces.
If a mason mixes concrete and mortar, color the #13 spaces.
If a mason installs furnaces, color the #14 spaces.
If an architect designs buildings, color the #15 spaces.







2	14	3	10	14	2	10	11	2	10	6
		1	12	13	15	5	7 12 13	4	3	14
6 3 9	8	4	5	1	7	4 13	15	7 1	6	8
2	10	7	14	13	2	11	12 7	11	2	3
14	3	13	5	11	3	1 4	13	12	14	9
		9	8	14	6 2	10	3	10		



List the tools, materials and people needed to construct a building.

ERECTOR SET

Instructions: List at least five occupations that are related to the Erector Set game that interest you in the column under occupations. Name the cluster it belongs to in that column. List the kinds of education, training and/or experience the occupations you listed require. Hint: You might find talking to the others who played the game with you will help you think of occupations in the construction cluster. You might also want to look at The Children's Dictionary of Occupations.

OCCUPATION	OCCUPATIONAL CLUSTER	TRAINING NEEDED

FOURTH GRADE MODULE REVISIONS

By

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and
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These revisions are based on the original module materials; the impromptu changes were made by the researchers as the unit progressed and include suggested changes from teachers as well as project staff. As such, the module revisions are not entirely the product we used and are not the product reflected in the testing phase. Revisions constitute what we would use the next time. The format of these revisions will be a reference to the initial module followed by a discussion of what actually transpired, followed by a suggestion for future use.

MODULE INTRODUCTION

The purpose and premises of the original module remain as stated on its first page. The mention of At Least A Thousand Things To Do (by C. Farnett, I. Forte, and B. Loss, Nashville: Incentive Publications, 1977) is an important reference. The publishers have available a packet of printing masters for their worksheets.

The original module called for a six-week series of five days per week, 45 minutes daily. We (as did the regular teachers) shortened the sessions to 30 minutes daily because we had premonitions of too much dead time with no scheduled activities. In some lessons the 30 minutes was woefully inadequate but on other days 30 minutes seemed interminable. An experienced teacher should be able to adjust accordingly, flowing into other activities.

As visiting teachers, constrained by a specific schedule each day, we had no opportunity to adjust to the individual daily requirement for time. For planning purposes we suggest alloting 30 to 45 minutes for the activities herein but the classroom teachers should adjust their own schedule.

Our classroom experience involved two visiting teachers (the researchers), splitting the class into two groups of 16 or 17 each. The teachers switched groups each week in order to minimize teacher differences, if any. One teacher remained in the regular classroom while the other teacher went to aother room. (This is a valuable technique for a visiting or substitute teacher; it removes the kids from their territory to "neutral turf.")

WEEK ONE

The original module provides a short introduction to clustering followed by a "Job Cluster" worksheet. After listing the clusters we listed several examples of specific jobs in each cluster. Hospitality and Recreation was the most familiar cluster. Question: "Which cluster fits a rock group?" The worksheet, and subsequent worksheets, have no space for the student's name. Individual teachers may want to include name lines according to their school's format. The cluster circles in the original worksheet should be rectangles with lines, fourth grade lettering or script is poor generally. Worksheets such as this afford a multidisciplinary task, handwriting and spelling may be stressed in addition to a focus on jobs and job clusters.

Week One--Unit Two

The questioning strategy worked well. After this session we explained the purpose of the worksheet notebooks, including an admonition that "Careers" was a graded assignment.

Week One--Unit Three

The levels of skill and training as sources of differentiation of jobs in "Manufacturing Match" was a concept new to the students. We both reported the kids felt this worksheet was boring. Additionally the writing blanks were too small. As an introduction to manufacturing this unit was a failure. Perhaps a visit to a factory or a step-by-step manufacturing process description would be helpful. The nongender stereotyping on the worksheet prompted no comment.

Week One--Unit Five

Rather than use all games each week we used one game per week with all kids participating. Since we had several sets per game we had no overcrowding. We did not use the game worksheets primarily because the students actively played the games. We have no educational rationale for not using the worksheets. As suggested by one fourth grade teacher, the games could be used as springboards for discussions, had we not been constrained to a set schedule each day.

WEEK TWO

The three behavioral objectives of the original module were met incompletely. The first two were given scant exposure, at best, through these activities.

Week Two--Unit One

"Family Career Tree" was a failure. First, the original module worksheet makes no provision for matrilineal and patrilineal branches (four grandparents, not just two). The activity is disturbing to those whose families

do not fit the nuclear family mold. Perhaps an open discussion of parents' occupations could be a substitute activity.

Week Two--Unit Two

The discussion was mixed between blatant gender stereotyping and infrequent poignant comments of gender differences. We saved the final activity about defining sex role stereotyping for the next day. We reminded the students of the homework assignment; however, to avoid parental friction, we did not send the worksheet--TV Sex Role Stereotypes--home with the students.

Week Two--Unit Three

The "TV Sex Role" discussion was excellent. As a preliminary we asked the students to list the occupations of their favorite TV characters. In response to their list we listed another character of the opposite gender who had the same occupation. With the exception of sports both genders were well represented in TV characters. A word of caution: the teacher should be fairly well versed in current television programs for this exercise.

Week Two--Unit Four

This lesson was a fizzle. However, continuing to focus on the TV characters seemed to work better than personalizing sex role stereotyping.

Week Two--Unit Five

This week we played the Junior Executive game. For the first time we did not include loans and interest, but did include them in subsequent game sessions. The students tended to gender group, which we intentionally blocked.

WEEK THREE

Week Three--Unit One

"Dependency Defined" was very popular with the class. However, several of the space numbers were difficult to read. Fewer extraneous drawings on the edges and more space for the puzzle would be helpful.

"Joint Accounts" was one of those worksheets which proved too simple for some but too difficult for others.

Week Three--Unit Two

Once the jobs of the typesetter, editor, and proofreader were explained, the "Paper Connections" worksheet was easy. However, a similar worksheet, keyed to the various occupations of the parents, would be much more important. The idea of interconnectedness in jobs is important but a personal example is more relevant than an unfamiliar example. The geographic ties could also be related, expanding the scope of the lesson. If one industry must be used, surely the TV or construction industries are more familiar than newspapers. As with other worksheets, the varying work speeds among students continued to be a problem.

Week Three--Unit Three

"Assembly Line" was not successful. The unfamiliarity with the processes involved was a problem and by the third consecutive day of worksheets the class was a bit resentful. Here, again, a field trip would be much more useful than worksheets.

Week Three--Unit Four

The "Working Attitudes" sheet was not well received. Whether because of four days of worksheets or because the worksheet was boring, the effect was a dismal day. Perhaps charades or stories reflecting the interaction

of job performance and attitudes would be better.

Week Three--Unit Five

Due to the President's Day holiday, no session was held on Monday of this week. To compensate, we altered our schedule to exclude the Endangered Species game. The game was available in the classroom and was used during free time and during subsequent game day sessions.

WEEK FOUR

The second instructional objective was addressed only briefly, if at all. This objective could have been addressed directly during the class meeting, however, we chose to encourage the direction of the student's choice rather than impose our own direction beyond the opening contention statement.

Week Four--Unit One

As with the "Dependency Defined" (week three, unit one) worksheet, the class liked the worksheet but poor printing posed numerous problems. As before, larger puzzles, rather than decorative cartoons, would help this worksheet. Some students completed the worksheet quite quickly while others took the entire time period. The debate was not conducted due to time constraint. We suspect the debate process should be introduced in class well before it is tried on such a volatile subject. Once learned, debates should be both effective and enjoyable.

Week Four--Unit Two

We have "Oh Yes Girls Can" to girls first and "For Boys Too" to boys initially, then reversed. They had less trouble with the thought that non-stereotypic careers were possible than with the task of listing requisite

skills. With the other half of the class we gave male traditional occupations ("Oh Yes Girls Can") to boys and female traditional occupations ("For Boys Too") to girls first, then reversed. This second group had less difficulty, presumably due to more familiarity with the occupations. If the message is: gender is not a crucial variable in job skills, then both worksheets should be appropriate for both genders.

Week Four--Unit Three

This unit did not go well. The class spent an exhorbitant time writing what they would like to be. The boys concentration on football positions and rock stars. Switching papers caused giggles and general silliness. We did not get to the #5 and #6 parts of the questioning strategy. Perhaps listing (by students) a few occupations on the board would reduce the writing time.

Week Four--Unit Four

In one group the class meeting was chaos. In the other group we had a very productive discussion of the topic "Can a Woman be President?" Interestingly, the boys were all for the negative except the one class troublemaker who also was far advanced intellectually. He sided with the group of girls who were the affirmative. One girl sided with the negative initially, followed eventually by another girl, her best friend. The first girl was quite active in the discussion until joined by her friend whereupon both dropped out of the discussion and whispered together.

The class meeting extended beyond our normal period and was a topic of conversation in later days. Seemingly the meeting concept was popular and should be used more often, perhaps as an alternative to some of the less interesting worksheets.

Week Four--Unit Five

The Super Sandwich game is a bit confusing the first time played, however, it is very popular thereafter. Several of the students borrowed the nutrition cards to figure the nutritional content of the school lunch. Once explained, the nutrition aspect of the game became very interesting. Mixed gender groups still are not common, usually we assigned groups in order to mix genders.

WEEK FIVE

Week Five--Unit One

"Career ABCs" was well-received, surprisingly, for we had anticipated the worksheet would be boring. We divided the alphabet into groups of four, assigned teams for each group and reported orally to the entire group. The class used regular dictionaries, The Children's Dictionary and the World Book. Robot cards also are a familiar source although the cards were not used.

Week Five--Unit Two

"Riddling Careers" started slowly until the kids became familiar with the process. We divided into pairs and made up other riddles. This activity was quite popular. One pair of boys embellished their riddle with a charade of the answer. This day's activity was very popular.

Week Five--Unit Three

"Career Wheels" should be bigger, the writing space is too small. The activity was moderately interesting. Perhaps listing school skills on the board or on a worksheet and then doing a matching exercise would be an alternative.

Week Five--Unit Four

Writing lines should be added to this worksheet. The activity also could be changed to first describe several skills learned in school then bring out occupations for which those skills are necessary, since the school skills are more familiar than occupations. Tying school to occupations surprised several students. Apparently they had not thought school tasks were very relevant to later life. Math skills, in particular, needed discussion.

Week Five--Unit Five

The Erector Set is a favorite toy. The boys are very familiar with them, many have sets at home. Girls were interested but unfamiliar with the toy. We assigned girls to be team leaders, had them pick teams (alternating boy/girl picks) and had a competition to build the highest stable structure. Boys immediately took over one group while the girl team leader in the other group asserted herself, and, acting on our suggestion, assigned small groups to work on sections to be assembled together later. The boys in the first group produced a very flimsy structure while the organized group did much better. The only problems with Erector Sets are the shortage of wrenches for group activites and the annoying fact that disassembly also takes time. Girls like the activity and quickly lost their reticence when they became competent in constructing with the Erector Set.

WEEK SIX

Each day groups were assigned and the Unit Five activities were alternated. We did not use the game worksheets only because the class time was limited. The classroom teacher encouraged playing with the games in other

periods so the students were familiar with all the games. Erector Sets were most popular while the Ungame and Endangered Species were the least popular. PACT puzzles and Robot Cards were solitary or pair activities. Our only intervention was to assure mixed gender groups for the games and settle disputes when necessary.

Fourth Grade--Six Weeks--Five Sessions, 45 Minutes Each--Two Groups

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Unit 1 Introduction	Clusters Sht.	Cluster Q's	Manufacturing	Hospital	Robot
	Robot	Cluster Sht.	Cluster Q's	Manufacturing	Hospital
Unit 2 Self & Family	Family Tree	Opposite Sex	TV	Role	Junior Exec.
	Junior Exec.	Family Tree	Opposite Sex	TV	Role
Unit 3 Interdependency	Dependency	Joint Accounts	Paper Connect.	Assembly Line	Working Attit.
	Working Attit.	Dependency	Joint Accounts	Paper Connect.	Assembly Line
Unit 4 Girls Can, Boys Can	She/He	Oh Yes/Boys Too	I Would Like	Class Meeting	Super Sandwich
	Super Sandwich	She/He	Oh Yes/Boys Too	I Would Like	Class Meeting
Unit 5 Career Planning	Career ABC's	Riddling Careers	Career Wheels	School Prep.	Erector
	Erector	Career ABC's	Riddling Careers	Career Wheels	School Prep.
Unit 6 Review	Junior Exec.	Super Sandwich	Space Hop	Endangered Sp.	Construction
	Construction	Junior Exec.	Super Sandwich	Space Hop	Endangered Sp.

POST TESTING INTERVIEW WITH 4TH GRADE EXPERIMENTAL TEACHERS*

Q: Which materials were popular with your class?

A: Fortunately we work in small groups often; therefore, games such as Space Hop, Junior Executive, Super Sandwich, and Endangered Species are popular, if there are enough to go around. Robot is popular in pairs or trios. The Erector sets are suitable for a maximum of 10 kids.

Q: WHich materials were unpopular?

A: The Ungame interested me but the class did not seem interested.

Q: Will you use the modules again in this grade?

A: Yes, with situational modifications.

Q: Are there any specific careers you would add?

A: I would include those careers common to this area, agricultural and factory. Also I would give greater emphasis to homemaker skills for both genders.

Q: What other changes would you make?

A: Field trips to work areas would make careers more real. Also having doctors or engineers or whoever come to the classroom would be helpful.

Q: Were there any worksheets you would not use?

A: The Family Tree posed problems for those with nontraditional families and for those who did not know much about their ancestry. For some reason the Working Attitudes sheet was confusing and unpopular. Similarly, Career Wheels posed problems--they are not aware of enough careers to complete the assignment.

Q: Any other problems with the worksheets?

A: I will use fewer worksheets because the class has a marked variation in working speeds. Thus, some kids complete the worksheets quickly and become bored waiting, while others never completed the worksheets.

*Both the teacher who presented the module and the teacher who observed researchers present the modules were interviewed.

Q: Do you have any other high points to observe?

A: The games should be used more as springobards to discussions, however, the module time prohibited this. In my own classroom the games could lead to lengthy discussions. Also, the debate in the class meeting (fourth week) was excellent. Far too seldom do we encourage kids to delve into subjects unstructured by the teacher. My other suggestion is to involve the occupations of every parent. With a little fore-knowledge I could tailor the module concept to make the parents' careers more relevant to the class. Overall, I like the module concept and will use it and the toys and worksheets again.